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EXTRA-UTERINE PREGNANCY.

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My desire in this paper is to present, as briefly and in as practical a manner as I can, the very important subject of Extra-uterine Pregnancy, or, as it is sometimes called, Ectopic Gestation.

In a communication like this there is no need to discuss the anatomy, physiology, or pathology of the subject. These points are all set forth in many well-known and excellent handbooks. It matters very little to a woman whether the ovum is impregnated in her ovary, her Fallopian tube, or her uterus, but it does matter to her where the ovum develops. For all practical purposes the abnormal site of development to be considered is the Fallopian tube, and, with very few exceptions, this is the

seat of the pregnancy, which we may have to treat under the heading of extra-uterine gestation.

To facilitate consideration of the subject, I have made four classes of cases:

1. Cases in which nothing can be done. The first intimation of anything abnormal existing in these cases is the sudden onset of alarming symptoms, such as abdominal pain, collapse, and death. The *post mortem* examination reveals a Fallopian tube distended and burst, with free hemorrhage into the abdomen. I have not yet met with a case of this description, but there have been many recorded. The patient dies in a very few minutes, or, at the most, in an hour or two.

2. Cases in which the patient survives the primary rupture, and in which the ovum escapes from the Fallopian tube and develops in the abdominal cavity. Two of my cases are examples of this kind.

3. Cases in which the patient does not die immediately, but gets repeated attacks of pain, &c., due to repeated bleedings from the ruptured tube or fœtal structures. Three of my cases are examples of this variety.

4. Cases in which all the evidence points to ectopic gestation, but in which serious symptoms do not occur more than once, from the fact that with the primary rupture of the tube and escape of blood either into the broad ligament or free into the abdomen the ovum perishes, and the hemorrhage does not return; or there may be only distension of the tube with blood and no rupture. These cases require no active treatment. I am sure I have seen several cases of arrested ectopic gestation recover completely without operation. It is most important to be able to distinguish between this set of cases and the set in which repeated bleedings do

occur, and the patient's chance of recovery hangs on the diagnosis.

I shall now briefly relate my cases, and then emphasise the important points which help us to diagnose—first, the nature of the case, and, secondly, the class of case.

E. R., aged 27, came to my out-patient room in the Bristol General Hospital, in January, 1888, complaining of great abdominal and pelvic pains, from which she had suffered for twelve months. She had missed one period at this date, and was suddenly taken ill with severe pain in the abdomen and faintness. I found an irregular tumour lying across the lower abdomen, and it could be felt *per vaginam;* and through the rectal wall I distinctly felt a foot of a fœtus free in Douglas' pouch.

I opened the abdomen, and removed a six months' fœtus which had been dead some months. The fœtus was free in the abdominal cavity. I brought the umbilical cord out of the wound, leaving the placenta untouched at the back of the uterus. The cord came away at the end of ten days; the wound closed at the end of a month; the placenta became absorbed, for at the end of six months I examined her, and found no trace of the placenta, which had been distinctly felt as a large retro-uterine swelling.

C. D., aged 31. I saw this patient in the country. She went to her full time with a living child in her abdomen, and apparently ordinary labour set in; the os uteri dilated in the usual way, and it was only at this stage that her real condition was discovered. During the whole of her gestation she had general abdominal pains, but there was no definite history of the usual severe symptoms indicating primary rupture of the tube. This may not have occurred. I saw her late one evening, and just before

my arrival the child ceased to move and died. As the child was dead, I advised, under the circumstances, that she should be kept in bed for two or three weeks and then brought into the hospital. Had the child been alive, I should have operated at once; but as it was dead, I deemed it wise to give time for the placental circulation to lessen. The patient was brought into the hospital, and I opened her abdomen, and found a full-term child free in the peritoneal cavity. I removed it, and fixed the end of the cord outside the abdomen. At the end of fourteen days the cord came away, and the wound healed. At the end of the month, as the temperature began to rise, the wound was re-opened, and a piece of placenta came away. I passed my finger down the sinus, which I had well washed out with boracic lotion. The discharge, in spite of all, became very offensive, and the patient died of septicæmia. The *post mortem* examination showed the remaining part of the placenta to be loose in a sac formed by inflammatory adhesions of intestines, &c.

From the consideration of these two cases, together with one of Mr. Greig Smith's and one of Dr. Champneys', I am inclined to say that the proper treatment of the placenta in these abdominal gestation cases (that is, where it cannot be removed as part of a gestation sac) is to tie the cord close down to the placenta, clean out the abdominal cavity, insert a glass drainage-tube for a day or two, and then let the wound close. The placenta may give no further trouble, but be absorbed, as it was in my case, and I believe in Mr. Greig Smith's case on which he operated about the same time that I did. But if symptoms of septic trouble arise, the abdomen should be opened again, and the placenta removed if possible. In my case, it might have saved the woman, and I think

also in Dr. Champneys' case, which ran a course very similar to my own. We all know the great danger of attempting to separate the placenta consists in the hemorrhage; and cases have been recorded where, after some months, attempts to remove the placenta have been followed by death from hemorrhage. But I consider we should explore if septic symptoms set in, and, if possible, remove the placenta, or, at all events, well drain that portion of the abdominal cavity where it is situated.

The three cases remaining were all examples of the class of early rupture of the tube and hemorrhage occurring at intervals.

The first (R. L.) was brought into the hospital with the history of having missed one period, and having been taken with great pain in the abdomen and faintness two days before. On her way in she had attacks of violent pain. I suspected extra-uterine gestation, and opened her abdomen. I found the diagnosis was correct; but all the parts were so matted together that I could not remove the damaged organs, and she died a few days after the operation. The *post mortem* examination revealed the exact nature of the case, and the specimen I showed at the Bristol Medico-Chirurgical Society last year.

The fourth case (S. W., aged 24) illustrates the great advantage of early consultation. This woman missed one period, and when the second should have come on she was taken with severe abdominal pain and faintness, but in a few hours she appeared quite well. She was, however, sent into the hospital. I examined her, and found a swelling as large as a small hen's egg to the left of the uterus. I suspected Fallopian gestation, and arranged, if any severe symptoms occurred, that I would open the abdomen.

During the night severe pains in the abdomen and faintness set in. The next morning she appeared pretty well. I found the swelling to the left of the uterus had disappeared, and instead of it there was a general fulness behind and at both sides of the uterus, and the lower abdomen also had a distinct line of resistance for a couple of inches above the pubes, and extending laterally to the iliac spines. I felt sure I was justified in opening the abdomen, and did so, and found at least a quart of blood free and the ruptured tube. I removed the tube, washed out the abdomen, and drained it for three weeks, as broken-down blood-clot came away daily. She made a perfect recovery. I consider that drainage is most important in these cases. Her first symptoms were due to sudden distension of, and *not* rupture of, the tube; the next attack of pain, &c., was coincident with the rupture of the tube and escape of blood into her abdomen.

Before I saw the case that I have just related, I saw, with a medical friend, a similar one, and it was the experience I gained from that case that helped me to diagnose my own; and it was the knowledge I gained by watching Mr. Greig Smith operate on that patient that enabled me to operate on my own case with such good results. That case began, like mine, with a swelling at the side of the uterus; but when I saw the patient this had disappeared, and I found a localised swelling behind the uterus (not at the sides of the pelvis), the uterus pushed up against the pubes, the os soft. I made an error in the diagnosis, and considered that it was a case of retroflexion of an early gravid uterus. Two days after I saw her again, and then the retro-uterine swelling had extended to the sides of the pelvis; and I then suspected extra-uterine gestation, with ruptured Fallopian tube and free

bleeding into the abdomen. Mr. Greig Smith then saw the case with us, and agreed in the suspicion; but as the patient's condition was fairly good, and the diagnosis doubtful, we agreed to wait. A further hemorrhage took place, and the patient was operated on. I simply mention the case as it shows how very easy it is to mistake a retro-uterine hemorrhage, with displacement forward of the uterus, for a retroflexed gravid uterus. I have seen and treated at least 50 cases of retroflexion of the gravid uterus, and yet, in spite of that, I mistook the nature of the case. I did not attach enough importance to the fact mentioned to me, that there was, to begin with, a left lateral swelling.

Previous to my last case, I saw, in consultation with another medical friend, a case with the history of suspected pregnancy and recurring attacks of pain in the abdomen, faintness, &c. When I saw the patient she was very pale, and the abdomen swollen. I diagnosed ruptured tubal pregnancy, and advised operation, which was done and the diagnosis confirmed, the abdomen being full of blood.

The fifth case I believe to be one of ectopic gestation. The woman had missed one period, and thought herself pregnant. She was suddenly seized with abdominal pain and faintness. There was distinct evidence of a large hæmatocele, both *per vaginam* and by abdominal examination. I kept her quiet a few days, and then she had a very severe attack of pain and her temperature ran up. I opened her abdomen, and found recent peritonitis with effusion, and a small black blood-clot in the fluid. I suspected at once leakage of an encysted hæmatocele, probably decomposing. With great difficulty, I broke through the roof of the hæmatocele

(formed by intestines matted together and fixed to the uterus, bladder, &c.), and evacuated about two pints of blood and blood-clot. I removed the tube and the ovary, from the surface of which free bleeding was going on, owing to the adherent intestines, &c., being torn from it. I broke away, in fact, a piece of ovarian capsule, with, I believe, the fimbriated end of the Fallopian tube attached to it, forming a gestation sac. I drained the abdomen for ten days, and she made a perfect recovery.[1] Whether this was originally an ectopic gestation which caused the hemorrhage or not, I cannot be absolutely sure; but I consider it was, and most likely a tubal-ovarian gestation. Under any circumstances, I consider that when we have a large hæmatocele showing signs of becoming purulent by rise of temperature, &c., it is our duty to open, wash out, and drain the cavity.

Shortly after this case I had another, where there was a suspicious history of pregnancy and then sudden abdominal pain and faintness, and for days persistent pain and high temperature. I suspected ectopic gestation, and opened the abdomen and found a large firm swelling, reaching from the brim of the pelvis half-way up to the umbilicus, consisting of bladder and intestines and effused products of inflammation. No uterus, ovaries, or tubes could be found; and in spite of persistent endeavours to open the swelling, I could not succeed. Two days after the operation, the patient passed *per rectum* a large quantity of broken-down blood or pus, and died after ten days with symptoms of septicæmia. The *post mortem* examination showed a very large cavity behind the uterus and one tube, which Mr. Morton examined and

[1] Mr. Morton kindly made an examination of the specimens in these two last cases.

considered to give evidence of having been the seat of ectopic gestation.

The points which help us in the diagnosis of tubal pregnancy may be thus summarised:

1. *History of the Patient.*—Often there has been for some years sterility, pointing most likely to tubal disease. There is the history of supposed pregnancy, on account of a period having been missed. But if no period has been missed, it must not be concluded that pregnancy does not exist; for in cases of tubal gestation, particularly where the tube is diseased, and even in normal uterine pregnancy there may be a periodic uterine hemorrhage, and, therefore, the non-missing of a period must not be held as conclusive of the absence of gestation. It is most important to get as accurate a history as possible from the patient or her friends.

A sudden attack of abdominal pain, faintness, and sickness, occurring in a woman who has had no definite local ailment which might have given rise to the symptoms, must be considered serious. If this sudden attack has been preceded by the missing of one or more periods, it is gravely suspicious of ectopic gestation; and if there is a recurrence of the attack in a few days or a week or two, it is still more suspicious.

2. *The Examination of the Patient.*—The woman may be, or may not be, very anæmic: this depends on the loss of blood, or on the recent or late occurrence of her primary attack. A woman with a large effusion of blood into the abdomen would be pale at whatever stage she was seen; but a woman may be very pale and collapsed with only a very slight loss of blood, simply from shock, as occurred in one of my cases where simple distension of the tube without rupture caused collapse.

The abdominal examination helps to a certain extent, especially where the effusion of blood is great. A swelling is recognised as coming up from the pelvis to a varying height in the abdomen; and if there is any sudden increase of this swelling, with the symptoms of pain, &c., it is very suspicious of fresh bleeding. Of course, all bladder complications must be excluded, and, by the history, all abdominal disease previous to the onset of the present symptoms.

A good deal can be learned from a vaginal examination, but it is almost impossible even for the most experienced to diagnose the case simply on this examination alone. I have already mentioned the case where I concluded I had to deal with a retroflexed uterus, and many cases at the outset have been regarded in this way. The great thing to do is, not to try to make too exact a diagnosis. If the mass behind the cervix uteri seems to be the fundus (and in some cases it feels rounded and continuous with the cervix uteri), a change of position may remedy the displacement if it exists. If there is a very painful swelling by the side of the uterus, and if in a few days this is lost in a general pelvic swelling with acute symptoms, it may be assumed that there is a ruptured tube, with or without pregnancy.

The most difficult case I have had to diagnose lately was that of a lady who came to Clifton to be under my care. She had a history of missing two periods. She had a rounded swelling to the left side of the uterus, and one posterior to the uterus; the os was soft. She also had had two or three attacks of uterine hemorrhage. I thought it was retroflexion of the gravid uterus, with diseased ovary and tube fixed to the side of the uterus; but I could not say that it was not a retroflexed non-

pregnant uterus with a Fallopian gestation. I was helped in the diagnosis by the absence of anything like severe pain or shock, which she must have had if the swelling by the side of the uterus was a pregnant tube; for she must have had pain from the distension of the tube, although it may not have been ruptured. Another point in her history helped me. She had been under my care some years before, with chronic pelvic pains. I made her assume the left lateral position, and in the course of a week the fundus uteri resumed its normal position, and the lateral swelling remained for two months as it was when I first saw her, and I have no doubt it was a chronic inflammatory condition of the left tube and ovary. Her pregnancy was uterine, and progressed normally.

One fact relied on is the passing of a cast of the uterus. This is generally coincident with the cessation of the abnormal pregnancy. The uterus when pregnancy takes place forms the usual decidual lining, and when the pregnancy is interrupted it casts off this lining; but by itself it is not a trustworthy sign, as it is so liable to be mistaken for early abortion, and in consequence the gravity of the case is entirely overlooked.

The whole diagnosis may be summed up in a few words. I should say that when a previously healthy woman misses one or more periods and is taken with acute abdominal pain and fainting, and these symptoms recur at short intervals, and the vaginal examination reveals a retro- and peri-uterine hæmatocele, either extending or not up into the abdomen, it is imperative to open that abdomen without delay.

HAY FEVER AND HAY ASTHMA.

BY

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OUR knowledge of the pathology of hay fever, and of the neuroses that frequently complicate it, has of late years become more exact and scientific, and consequently the treatment of these affections has been placed on a more rational basis with great advantage to the sufferers. Most cases may be partially, and many completely relieved, while a fair proportion may be altogether cured; it is important, therefore, that the varying conditions which may give rise to the symptoms be clearly recognised and differentiated.

Clinically we may arrange paroxysmal sneezers in three classes: (1) Those in whom the lesion is entirely peripheral, such as the earlier and milder forms of true hay fever, in which the symptoms appear only when the patient is exposed to pollen, etc., and for these, local treatment rarely fails; (2) Those in whom the symptoms, in the first place induced by peripheral irritation, have become more or less persistent, even in the absence of any pollen or special irritating particles; (3) Idiopathic cases, not due to peripheral irritation at all. It is with the pathology and treatment of the first two of these divisions that I now propose to deal.

Like most of the writers on the subject, I was myself

a sufferer from hay fever, till I adopted a mode of treatment which afforded a most welcome and complete relief.

Attention was first seriously directed to hay fever by Dr. Bostock, in a paper read before the Royal Medical and Chirurgical Society, in 1819, on a "Periodical Affection of the Eyes and Chest," and who, nine years later, published his further observations on what he termed "Summer Catarrh." The symptoms at that time were popularly supposed to be due to emanations from plants, but Bostock endeavoured to prove that they were produced by the solar rays. In 1869 Helmholtz propounded the theory that it was due to the action of vibrios. He believed that these existed in the nasal fossæ at all times, but that they were excited to activity by the action of the sun's heat. Other writers have ascribed it to certain animal and vegetable odours, to common dust, to the gouty diathesis, some occult atmospheric influence, etc.

Mr. C. H. Blackley of Manchester has set at rest all possible doubt as to the common exciting cause of hay fever. His experiments have shown that it is due to the action on the mucous membrane of the pollen grains of the following natural orders of plants: Ranunculaceæ, Caryophyllaceæ, Compositæ, Geraniaceæ, Leguminosæ, Graminaceæ, Papaveraceæ, Fumariaceæ, Cruciferæ, Violaceæ, and others. The pollen was applied to the mucous membrane of (1) the nose; (2) the larynx, trachea, and bronchial tubes by inhalation; (3) the conjunctivæ; (4) the tongue, lips, and fauces. In every instance the characteristic symptoms were produced, but the most potent pollen was that of the Graminaceæ. The Anthoxanthum odoratum is generally supposed to be especially active in this respect, but the rye grasses

and the pollen of the meadow grass (Poa) and meadow fox-tail, and of barley, wheat and oats, seem to be equally to blame.

The observations of Blackley were subsequently confirmed by Sir Morell Mackenzie, who moreover found, from experiments on persons not subject to hay fever, that pollen is a peculiarly irritating dust. Thus, he found that if pollen from any of the particular grasses referred to be "rubbed into the nasal mucous membrane of a healthy person, a feeling of stuffiness in the nose will come on in the course of an hour or two, and last several hours. The sensation is like that experienced at the commencement of a cold, but there is no sneezing or 'running from the nose.' The effect produced by pollen in the non-susceptible is considerably more active than that of tannin, alum and many substances of much stronger chemical character. Why pollen should prove a much more highly exciting substance to the mucous membrane of some persons than to that of others has not yet been determined." The proclivity is certainly not associated, as Sir Morell suggested, with a special keenness of smell, which implies a nervous apparatus of exceptional sensitiveness; but it is more probably often associated with individual peculiarities in the nostrils.

In America hay fever is known by the name of "Rose-cold;" but in this country, too, roses are sometimes found to give rise to the most severe forms of hay fever. Mackenzie tells us that so common is the scourge in the "Great Republic," that a few years ago a "Hay Fever Association" was founded for the collective investigation of facts and the mutual protection of sufferers.

Predisposing Causes.—When the exciting cause of hay fever is universal and practically everyone in this country

is exposed to it, while a very small minority are affected, it is obvious that individual predisposition is necessary for the symptoms to appear. It occurs most commonly amongst dwellers in towns and cities, though by no means exclusively. It is an affection which is almost confined to the educated classes, and to those who may be said to be of nervous temperament; but I have seen hay fever in a domestic servant, and an analogous idiosyncrasy to tobacco dust in a factory girl. There is no evidence to show that it is specially associated with the gouty diathesis, as has been suggested, or any other pathological constitution other than a strongly neurotic temperament.

It appears to be more commonly met with in men than in women. Thus in Daly's 81 cases, and in 61 cases seen by Mackenzie, about three in five were men, but my own more limited experience gives the proportion as three males to seven females.

The predisposing "nervous" temperament has a tendency to be hereditary, and therefore, in that sense, the affection is often hereditary.

Hot weather increases the severity of the symptoms, partly, no doubt, from its promoting the formation and liberation of pollen, but also from the fact that the sun's rays alone may cause sneezing by stimulation of the facial and conjunctival branches of the fifth nerve reflexly irritating the nasal mucosæ. The effect of heat, however, is much exaggerated from the fact that the exciting cause prevails during the warm summer months—heat alone cannot cause hay fever. The effect of dust is also merely to increase the irritability of the mucous membrane.

Local Conditions.—It is only within the last few years that the importance of pathological conditions of the nasal

passages as the essential cause of hay fever has been fully appreciated. I have already alluded to the obvious fact that individual predisposition is essential to the disease, and that it is found in those of the nervous temperament. But of "neurotics" only very few are subject to hay fever, and it is observed, though less commonly, in those who are the reverse of neurotic. We have seen that it has been generally referred to an idiosyncrasy which makes the patient remarkably susceptible to this particular form of irritation. The peculiar susceptibility of some individuals to rhus poisoning has been cited as an instance of such idiosyncrasy, and of this the case reported by Mr. A. W. Prichard [1] affords an excellent example. Another case in point is that of a girl who worked in Messrs. W. D. and H. O. Wills' tobacco factory. She complained of incessant sneezing, which came on as soon as she entered the workroom, and continued till she went out. She was very anxious to work, and at first managed to do so, in spite of her sneezing to such an extent that she was nicknamed "The Sneezer," an appellation which showed her statement to be correct when she told me that her case was unique there. So incessant did her sneezing become in the course of a month or so, that if she went to her work she had to come away very soon. As she never suffered from hay fever or paroxysmal sneezing outside that factory, this may be taken as a clear case of idiosyncrasy to tobacco dust, and it is only reasonable to allow that an analogous idiosyncrasy must be held to account for some cases of hay fever and hay asthma.

But the fact that local pathological conditions in the nasal passages are frequently the real cause of the disease

[1] *Bristol Med.-Chir. Journ*, vol. ix., 1891, p. 22.

is equally placed beyond doubt by the many radical cures effected by local treatment. The more attention is paid to the nose the greater is the proportion of cures, and the great importance of recognising these curable cases can hardly be exaggerated.

Ten years ago Dr. Roe of New York reported the excellent results he had obtained from the treatment of the hypertrophied erectile tissue of the nose, which has been observed in every instance in those who are the subjects of hay fever. He has directed attention to the spurs, the spiculæ of bone which are often found projecting into the nasal passages from the turbinated bones and from the septum, and which set up irritation in their neighbourhood, causing more or less chronic rhinitis or nasal catarrh at some other period of the year, although often not sufficiently severe to give rise to much annoyance. It is to the observations of Dr. Roe that the credit is due for the recognition of those local conditions as the cause of the disease, and in the main his remarks have been amply confirmed by many laryngologists.

The abnormalities that are met with in hay-fever subjects are: (1) Those known generally by the term hypertrophic rhinitis, in which the mucosa of the floor and of the septum, but especially the tissue covering the inferior and middle turbinated bones, is thickened or unduly vascular; (2) Spurs and bony projections of the turbinated bones; (3) Deviations of the septum, causing partial or complete occlusion of one nasal passage; (4) Polypi and adenoid hypertrophy of the naso-pharynx; (5) Peculiarly sensitive areas in the lower half of the septum and the floor of the nasal fossæ. Chronic pharyngitis with relaxed fauces and elongated uvula are frequently set up by repeated attacks, and more or less persistent asthma

and consequent bronchitis are not unusual in the graver cases.

But those who espouse the purely anatomical lesion theory are probably as much in error as those who adhere to the old idea that the symptoms are wholly attributable to pollen. For the symptoms to occur, three factors are generally necessary: (1) The predisposing constitutional condition; (2) An external irritant, viz., pollen of grasses, etc. in hay fever, of roses in rose fever; (The rare instances of asthma induced by the presence of dogs or cats or horses, are analogous cases.) (3) A pathological condition in the nasal passages, forming or causing a sensitive area.

The Symptoms in the majority of cases begin in Great Britain in the first week in June, recurring each year with an almost ludicrous punctuality on about the same date and lasting to the middle of August. In America the first onset is generally about the middle of August. At first only a slight itching of the inner canthus is observed, and watering of the eyes. In a day or two some irritation in the nose with watery discharge comes on, and pricking and dryness in the throat. Very soon attacks of sneezing supervene, and recur with increasing frequency, without the pleasant sense of relief that is usually associated with a good sneeze. The conjunctivæ become injected, the eyes bloodshot, and the nasal passages more or less blocked up by the swelling of the mucous membrane and turgid erectile tissues. The soft palate and uvula become relaxed, and all the painful symptoms of "clergyman's sore throat" are experienced, even ordinary conversation being an effort.

At first the symptoms are merely annoying, but with each annual recurrence they become more and more severe, and life is rendered a perfect misery during the three brightest months of the year. The symptoms are

associated with intense prostration, altogether out of proportion to the local irritation, and health is greatly impaired for many weeks after the peculiar symptoms have subsided.

In the worst cases attacks of spasmodic asthma come on early, and sometimes the patient is never free from asthma for weeks continuously. The asthmatic condition persists for some time after the hay fever has disappeared, and the period of persistence tends every year to lengthen, till the unhappy sufferer becomes a confirmed asthmatic, and is never free from the attacks throughout the year. A patient recently under my care had suffered from spasmodic asthma since early infancy, and he could not remember any time in his life when he was not subject to attacks. Unlike most asthmatics, he was worse in summer, and I have no doubt from his description that he suffers from true hay fever in the summer months and that it was the original cause of his asthma. He is an example of a large class of asthmatics, the source of whose trouble is the sensitive area in the nose, stimulation of which causes reflexly contraction of the smaller bronchial tubes. Sir Andrew Clarke is of opinion that hay asthma is due to the sudden swelling of the mucous membrane of the bronchial tubes, causing partial occlusion of the lumen. Blackley's observations on the result of inhaling pollen lend some support to this view; but it is difficult to understand why a non-erectile tissue should undergo sudden swelling, and there is hardly sufficient evidence to justify the theory that hay asthma is produced otherwise than by reflex contraction of the unstriped muscular fibres of the smaller bronchi. Nevertheless there is almost invariably bronchial irritation of greatly varying intensity, with thin watery mucous or muco-purulent expectoration.

Until recently the *treatment* of the affection under consideration has been, as Mr. Lennox Browne so aptly puts it, not only most irrational, but (if one may use such a term) cowardly: for instead of attacking the predisposing idiosyncrasy, or the local hyperæmia, the former has been accepted as inevitable, and the latter ignored; while as to the exciting irritant agent, it has simply been shut out. Of course for wealthy patients with ample leisure, nothing is pleasanter and more effectual than a sea voyage, removal to a "hay fever resort," or residence at the seaside during the hay fever period, but the majority of sufferers are not so happily circumstanced as to render such measures possible.

With the object of excluding the pollen-grains, patients are often advised to plug the nostrils with medicated wool, and to wear goggles, and in the case of women to wear a thin gauze veil when out of doors. Such methods are very ineffectual, and anyone who has tried plugging the nostrils with wool in summer will hesitate before suggesting it to a patient.

During the paroxysms of hay asthma palliative treatment alone avails, but a great deal may be done towards warding off the attacks by the administration of strychnine and arsenic in *small* doses. Sedatives, unfortunately, always leave the patient worse for the remedy, even if it has been necessary for temporary relief; and when, as is often the case in asthma, their frequent repetition is called for, the amount of harm they do is no light matter. "In order to form a conception of the manner in which strychnine relieves asthma, it must be borne in mind that under no circumstances does spasm exist in virtue of any undue supply of nerve-tone to the bronchial muscles, but rather to a perverted or depressed state of the pulmonary nerve

supply, both central and peripheral, and a consequent loss of respiratory co-ordination. It is reasonable to believe, therefore, that any agent like stramonium, tobacco, lobelia, nitro-glycerin, pilocarpine, morphine, etc., which possesses the power of narcotizing or paralyzing the nerves which incite the bronchial spasm may also relieve the grip of the latter; but it is also clear that the nerves whose integrity is already impaired are enfeebled still further by such a procedure,—which at best has but a temporary influence. The most rational plan of treatment is one which elevates the tone and increases the normal resistance of the pulmonary nerves." [1]

The importance of treating the constitutional condition by promoting the health and strength in any hay fever subject is very generally recognised, and the administration of tonics, such as iron, quinine, and arsenic, a course of massage, the regulation of the bowels, etc., for a few weeks before the usual period of onset of the characteristic symptoms, will do much towards lessening the severity of the attacks and preventing the general impairment of health which they induce.

Local treatment may be divided into two classes: (*a*) radical, (*b*) palliative.

Radical treatment generally gives very excellent results in simple hay fever, and not infrequently a perfect cure is obtained in cases attended with asthma. Every case should be carefully examined for any of the abnormalities in the nasal passages previously alluded to. On examining first without using cocaine, a thickened vascular condition of the mucous membrane of the inferior turbinated bone and other structures is very often found, and by passing a probe in various directions, sensitive areas

[1] T. J. Mays, *Internat. Clinics*, vol. ii., p. 63

may generally be detected. By spraying the nostrils with a solution of cocaine the vascular swelling of the mucous membrane may be made to subside, and the existence of any spur or spicula projecting from the turbinated bones, or of any deviation in the septum, becomes obvious if present.

If only thickening of the mucosa and sensitive areas is present, a method of treatment I have employed, and which in several cases has been completely successful, consists in spraying the nose with a solution of "iodic-hydrarg." (1 in 1000).[1] As soon as the effect of the cocaine passes off, the pain is intense and lasts for two hours, and therefore I generally give morphine hypodermically immediately after the spray has been used. The mucous membrane of the nose rapidly swells till the nose becomes blocked. The conjunctiva becomes suffused and considerably irritated. In about an hour and a half or two hours the swelling and pain subside, with a condition similar to common nasal catarrh lasting for twenty-four or thirty-six hours. In suitable cases if this be efficiently done at the onset of the symptoms of hay fever, the patient will remain free throughout the season, and there are very few persons who have endured the annoyance and depression of health that hay fever produces who will not gladly undergo this or any treatment which promises relief. This method has the advantage of leaving the sense of smell unimpaired and involves no destruction of tissue, but it differs in detail only from the procedures recommended by many others. Thus Sir Andrew Clarke found great benefit in about half his cases from painting the nose with a mixture of glycerine of carbolic acid, quinine, and perchloride of mercury. Sir Morell Mackenzie had

[1] This is a soluble preparation of iodide of mercury, prepared by Messrs. Burroughs, Wellcome & Co.

no faith in Sir Andrew Clarke's method. He had not tried it himself, but had seen three cases in which carbolic acid was employed by others in hay fever, and in none of them did it produce any permanently satisfactory results. "With regard to the other drugs suggested by Sir Andrew Clarke, it has been abundantly proved that quinine is perfectly useless in hay fever; and as there is nothing of a septic nature in the disease, it is difficult to understand what can be the advantage of applying either that or perchloride of mercury."

On the other hand, Dr. Greville Macdonald has seen good results from spraying with very weak chromic acid solution. These applications owe their efficiency to their irritating character, and not to any antiseptic property. The use of quinine as suggested by Helmholtz is useless, and is condemned by nearly all observers who have tried it.

Hyperplasiæ of the mucosa, and especially thickening over the inferior turbinated, should be reduced by the galvano-cautery, and any sensitive spots should also be cauterised. The senseless destruction of large areas of the mucous membrane is to be deprecated as worse than useless. The hand should always be guided by the eye and the hyperæsthetic areas only be cauterised. Bony spiculæ should be removed by scissors, drill, or gouge. A deviated septum should be straightened, or bony prominences rapidly removed by a dentist's drill. Polypi, if found, must be snared and treated in the proper manner.

Many a case of hay fever, of hay asthma, and also of ordinary spasmodic asthma, will be cured by the treatment of these deformities. Some of the apparently most hopeless cases give the best results. On the other hand, a certain proportion of failures will inevitably occur; but when everything else has been tried, we shall not have

done justice to a patient till the abnormalities, if present, have been removed.

All local *palliative measures* are eminently unsatisfactory; for though effectual at first, they soon lose their power, or at any rate their action is but temporary and requires constant repetition. Their number is legion. Ferrier's snuff and menthol snuffs are sometimes of service. Cocaine in any form whatever is to be condemned. Its good effect is very temporary, and its bad effects both local and general are not long in appearing. Hinket of New York advocates the use of a 4 per cent. solution of antipyrin instead of cocaine. For inhalation the vapor benzoini and v. benzoini c. chloroform. of the Throat Hospital Pharmacopœia are very soothing, as also are terebene, pinol, eucalyptus, creasote, or camphor inhalations. Nitre papers, made by soaking six thicknesses of blotting-paper in a saturated solution of nitrate or chlorate of potash, and, after drying, sprinkled with spirits of camphor, tinct. benzoini co., tinct. sumbul, or stramonium burned and the vapour inhaled, also are useful.

It is a good plan to paint the inner canthus and palpebral conjunctiva with a weak solution of perchloride of mercury or nitrate of silver, commencing some days before the symptoms appear. The beneficial effect is due to their rendering the mucous membrane less susceptible, and not to their antiseptic or germicidal properties.

Dr. Gaul reports great success from the employment of a decoction of bidens bipinnata (Spanish needle), a popular remedy in the United States for the cure of asthma.

Hypodermic injections of morphine, or a combination of the fluid extracts of quebracho, grindelia robusta, ethereal tincture of lobelia, given frequently in hot water and brandy, will give rapid relief in a paroxysm of hay asthma.

Health-Resorts in the West of England and South Wales.

VI.

TENBY.

BY

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TENBY, which as a health-resort has a summer and a winter phase, is a town with a population of 4,500. It is situated on lime-stone, and runs out as a promontory into the sea with a bay on either side—north and south. It lies in the Bristol Channel, and is protected from the big seas of the Atlantic by Caldy Island on the south.

The North Bay is large, and is bounded by the hills of Carmarthenshire; and on the east by the Worm's Head, a point of Gower Land distant nearly twenty miles. There is very good bathing here. The sands are not so extensive as on the south side, but they are well protected when the equinoctial gales are on. By many persons this bay has been compared to the Bay of Naples. Here is the pier, with its harbour—usually occupied by vessels engaged in trawling, which come from Brixham, Liver-

[1] For the views which illustrate the paper I am indebted to the publisher of *Mason's Guide to Tenby*, Mr. F. B. Mason, Tenby.

pool, Plymouth, and other places, specially in spring and summer, when there is a large quantity of fish in "the Channel."

The South Bay looks out on Caldy Island. Giltar and Penally are on the west. The sands are very extensive and firm, and are much used for walking and riding. Here, too, the greatest amount of bathing is carried on.

Tenby from the North.

Within the last few years the Tenby Marine Baths Company has opened new and spacious public baths, adjoining the entrance to the South Sands, where hot and cold (sea and fresh water) baths can be had daily, from 7 a.m. till 8 p.m., and on Sundays for a couple of hours in the morning.

The sands in both bays, besides being used for bathing, are generally frequented by enthusiasts after shells,

actiniæ and other zoophytes, of which Mr. Gosse, in his book on Tenby, has given a most interesting account. On the South Sands, near the Castle Hill, which is the extreme eastern point of the town, stands St. Catherine's Rock, insulated at high-water. This island is remarkable for the beautiful caverns with which it is pierced, and as

Tenby from the South.

the rocks in places are covered with seaweed, invalids and children can inhale iodine freely.

Promenades are a matter of great importance to invalids and visitors. The chief one is the Castle Hill, which runs out into the sea, and is always, so to speak, "in the sea." Its well-kept walks, grassy slopes, and

seats dotted about everywhere, make it a favourite resort. The Esplanade is more stately, and reminds a visitor of the Promenade at Brighton, only in a smaller degree. It is not so private as the Castle Hill, and is overlooked mostly by lodging-houses. During the last few years it has been extended towards the west, and numerous seats have been placed here and there. The Croft is also used as a promenade, only in a lesser degree. Here is the Tenby and County Club, to which visitors are admitted on payment, varying according to the length of membership.

For the beauty and variety of its country walks and lovely scenery, Tenby stands almost unrivalled, considering how much it is surrounded by the sea. Giltar, at the extremity of the South Sands, with its limestone cliffs nearly 200 feet high; Waterwynch, with its interesting little bay; the village of Penally; Gumfreston, with its chalybeate springs; and Saundersfoot, are all within easy walking distances, and are well worthy a visit. For those who cannot walk much, and wish to see the various castles, &c., around Tenby, there is a capital supply of carriages; besides, there are the usual bath-chairs for hire on the sands and about the town.

Boating is very good, and during the summer season there is plenty of sea fishing by line and rod.

To the botanist, the country around teems with treasures, though the inroads of the railway and higher cultivation of the land have done away with many rare plants. Professor Babington told me, on his last visit here, that the Tenby plants numbered about 550, nearly all of which he had observed himself.

Having described how a visitor can occupy himself, and raise the general tone of his health during the

summer, let us consider Tenby in the dull months of the year.

The mildness of the climate has for many years been well known to the medical profession and others, but the mania for high altitudes in winter has lessened the number of our winter visitors during the last few years. The climate, though humid, is warm and yet bracing; the difference in day and night temperature is not great. Extreme cold is rare, and snow seldom lies on the ground. There is a great freedom from thunderstorms and fogs by land and sea; and in the depths of winter there is a wonderful purity of sky and a great power of sun. The rainfall is moderate, and it is not so continuous as to compel invalids to stay indoors for twenty-four hours.

The mildness of the climate is proved by the fact that fuchsias, and many other delicate plants, live out of doors all the winter; primroses are usually found in blossom in the hedges in the first week in February; and the goldfish in the pond in my garden have lived through four winters.

Mr. Gower, who has charge of the meteorological instruments here, has sent me the following notes, and I think I had better give them in full:

"For the purpose of correctly determining the climate of any place, it is necessary to take an average of the regular, continuous observations of a number of years. In December, 1890, a meteorological station was established at Tenby, but the data used in this article have been largely taken from the official published records of the observations at St. Ann's, on the South Pembrokeshire coast.

"In common with all south-western counties, the air of Pembrokeshire is humid; the average amount of annual rainfall is not nearly so high, however, as might be in-

ferred. The annual rainfall of Tenby is that of the whole country—35 inches. The rain falls more heavily and more frequently during the night than during the day; the all-day drizzling rains of hilly districts are almost unknown; the geological formation of the peninsula on which Tenby stands is highly favourable to the rapid escape of surface water: thus little discomfort is experienced from rain, and the temperature gains considerably from the latent heat set free by the condensation of the moisture. The high temperature of the water of the ocean doubtless contributes most largely to the exceptional mildness of the climate. At all seasons the readings of the air and sea temperatures approximate each other. The records of the last twenty-five years furnish abundant and conclusive evidence of the equableness of the climate. The limited range of the day and night temperatures, and of the winter and summer means, are very noticeable. The following table shows how the extreme minimum readings compare with those of inland towns. The month of January, 1891, is selected; the temperatures are the lowest observed during the week:

Week ending	Pembroke.	Hereford.	London.	York.	Cambridge.
Jan. 10	25°	16°	15°	18°	15°
,, 17	30	—	14	22	7
,, 24	24	10	21	10	11
,, 31	41	34	36	34	33

"The month of July, with the extreme maximum readings observed during the weeks given, will show

the difference in the readings for the same towns in summer:

Week ending	Pembroke.	Hereford.	London.	York.	Cambridge.
July 4	61°	71°	77°	72°	76°
„ 11	59	74	72	72	70
„ 18	68	77	81	78	82
„ 25	61	73	71	70	72

"Thus, whilst Cambridge had a range of 75 degrees, Pembroke had one of only 44 degrees.

"The temperature of the sea-water is from 50° to 53° in the early spring, and from 60° to 63° in summer.

"There is an almost entire absence of frost and snow, and thunderstorms are of rare occurrence. The day is remarkable for clear blue skies. The average annual amount of sunshine during the decade 1881—1890 was 1,636 hours, or nearly five hours daily. The months of May, June, July, and August averaged seven hours a day. Taking into consideration that only *bright* sunshine is recorded, it will be seen that an extraordinary allowance of what is popularly known as fine weather is apportioned to Tenby.

"Briefly, the climatic advantages possessed by Tenby are: a summer temperature of Southern Norway, a winter temperature of the Mediterranean, an immunity from the inconveniences attending falls of snow and prolonged frosts, much sunshine and fine weather generally, advantages that largely result from a tepid sea that permits of open-air bathing during many months of the

year. And though its air is humid, the moisture is rarely condensed into fog. With its equable temperature, and atmosphere pregnant with ozone and iodine, Tenby offers to the invalid in search of a recuperative climate all the advantages and none of the inconveniences of a long sea voyage or a Continental health-resort."

In October, 1887, at Tenby, I had the honour of reading a short paper before a meeting of the South Wales and Monmouthshire Branch of The British Medical Association, on the mortality of Tenby during the fifteen years I had been medical officer of health; and as these statistics gave great interest to those who were present, I think I cannot do better than append them on the opposite page.

I chose twenty-one chief factors of death, and though I have not gone deeply into figures since I drew up this table, I think the average for the last four years would be about the same. For the last two years "The Infectious Diseases (Notification) Act of 1889" has been in force, and I have therefore a greater opportunity of judging of our freedom from contagious and epidemic diseases; and my tables will show how few deaths from these diseases occurred in fifteen years.

It is a well-known fact that, during the cholera epidemic in Bristol many years ago, not one case occurred here, though steamers were regularly plying between the two places, and a great number of persons availed themselves of the opportunity of leaving Bristol.

Many of my readers will be surprised to see how great the mortality has been from consumption. The only reason I can assign is, that most of these deaths occur amongst the poorer class, who, on account of their im-

		1872	1873	1874	1875	1876	1877	1878	1879	1880	1881	1882	1883	1884	1885	1886		
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
71 Contagious and Epidemic.	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Small Pox	
	12	6	0	3	0	0	2	0	0	0	0	0	0	1	0	0	Measles	
	7	0	0	1	0	3	3	0	0	0	0	0	0	0	0	0	Scarlet Fever	
	10	0	0	2	1	0	1	0	0	0	0	0	0	0	0	0	Typhus	
	6	0	0	1	0	0	2	1	0	0	1	0	0	1	0	0	Whooping Cough	
	3	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	Diphtheria	
	7	0	0	0	0	1	1	1	0	0	2	0	0	1	0	0	Simple Continued Fever	
	7	0	0	0	0	1	0	1	0	0	1	0	0	1	0	0	Enteric Fever	
	6	0	0	0	0	1	0	3	0	0	1	0	0	0	0	0	Erysipelas	
	3	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0	Pyæmia	
	9	0	0	1	0	1	0	5	0	0	2	0	0	0	0	0	Septicæmia	
	31	2	3	6	0	2	0	2	1	1	2	2	3	4	3	2	Cancer	
138 Constitutional.	124	7	17	9	3	5	7	10	4	9	7	8	13	17	9	3	Phthisis Pulmonalis	
	7	0	1	0	0	0	0	0	1	1	0	0	3	1	0	0	Tubercular Meningitis	
	7	1	0	1	0	0	0	0	0	0	1	0	3	1	0	0	Struma	
108 Nervous.	38	2	1	0	1	1	1	1	0	0	1	1	2	1	0	0	Paralysis	
	70	7	3	1	0	2	6	6	5	8	4	1	1	2	7	8	Infantile Convulsions	
Circulatory.	75	7	7	10	4	5	6	7	5	8	3	2	5	6	7	8	Heart Disease	
143 Respiratory.	79	9	6	6	5	4	3	8	7	6	5	6	4	3	7	7	Bronchitis	
	64	1	3	0	7	11	8	7	6	6	3	6	6	6	7	7	Pneumonia	
	152	12	13	18	9	9	3	8	12	13	8	6	6	9	11	12	Old Age	

provident habits, suffer from poor feeding in the winter. They do well in the summer, but will not provide for the times when they cannot work. In the district round Saundersfoot, three miles from here, there is a mining population, and most of these men suffer from carbonaceous lungs, or black phthisis, and chronic bronchitis. The daughters of these men generally find their way into Tenby as domestic servants; marry here, and often start a weakly and consumptive family. The death of a visitor here from consumption is a rare occurrence.

Renal calculus is a disease almost unknown. Cases which do marvellously well, when sent to Tenby, are those of struma in young persons and children. I have been watching lately a patient with spine disease, who had for three years been quite unable to walk, and who had a large discharging abscess; yet, without any special advantages, the patient can now walk well without the help of a stick. Asthmatical and bronchial patients derive great benefit from a sojourn in this place, and some never have the slightest attack while here.

I hope that the few notes I have put together may not be without interest to some of my readers, who may have no knowledge of my interesting little town, so often said to be—

"LITTLE ENGLAND, BEYOND WALES."

Progress of the Medical Sciences.

MEDICINE.

The subject of the Cerebral Palsies of Early Life has been carefully considered by Drs. Sachs and F. Peterson, who base their observations upon an analysis of 140 cases,[1] of which 87 were males and 53 females. 105 were cases of hemiplegia, 24 of diplegia, and 11 of paraplegia. The paralysis was either congenital or developed in early life, arising (1) from disturbances during pregnancy or from a tedious or difficult labour; (2) after infectious diseases, during convulsions, or from causes not ascertained. Except in two cases, there was in all marked spasticity and extreme contractures; in all except one the reflexes were exaggerated, at any rate on the side of the paralysis: in all, growth was retarded; in some, athetosis and post-hemiplegic disorders of movement were present. All stages of mental impairment from weak-mindedness to complete idiocy were observed. A few patients showed good mental development. Sensibility and electrical reactions were unaffected. From an analysis of the cases, it appears that diplegia and paraplegia are more likely to be congenital, and hemiplegia to occur during the first four years of life; but 20 per cent. of cases of hemiplegia are congenital. In Osler's tables, 15 of 120 cases of hemiplegia were congenital. From the ages at which the patients came under observation, it is deduced that those affected with diplegia and paraplegia are short-lived, but this does not hold good for hemiplegia.

From a study of the circumstances attending the birth in 49 cases of congenital cerebral palsy, we learn that the forceps should be applied if necessary, or delivery hastened by other means, if protracted labour can be averted. As to the occurrence of monoplegia, the authors always found evidence, though it might be very slight, of affection of more than one limb. Circulation in the skin is often as sluggish, and the livid hue of the affected limbs as marked, as in infantile spinal paralysis. Epilepsy occurred in 44.3 per cent. of all cases. In 50 cases (nearly 50 per cent.) of the hemiplegics, it was

[1] *Trans. N. Y. Acad. Med.*, 1891, p. 183.

general in 41, of the Jacksonian type in 9, and consisted of attacks of *petit mal* in 1. In 80 cases there was mental impairment, in 52 per cent. of the hemiplegic, in 71 per cent. of the diplegic, and in 82 per cent. of the paraplegic patients. Idiocy was most marked in paraplegic cases (45 per cent.), and least in hemiplegic (6.75 per cent.). The authors think that though there are some considerations in favour of Strümpell's polio-encephalitis as the lesion in question in these palsies, its existence is not yet definitely proved, and should be diagnosed only in default of other causes. They conclude that the form of paralysis is not the most important factor in diagnosis; that acquired cases of hemiplegia and diplegia, especially the former, are apt to be due to the same causes that prevail in apoplexies in adults—namely, hemorrhage, thrombosis, and embolism—but that meningeal and cortical lesions are more frequent than in adults. Convulsions and loss of consciousness occur in all cases of cortical lesion, however slight, and in cases of sudden hemorrhage and embolism; the absence of convulsions at the onset probably indicates an intra-cerebral lesion; their occurrence points generally to a cortical lesion, or to embolism anywhere in the brain. In a few cases, affection of the lower centres of grey matter may also be attended with convulsions. Convulsions frequently repeated after the onset point with great certainty to a cortical lesion. Cases coming on after one of the acute infectious diseases have been proved to be due to vascular derangement, particularly embolism and hemorrhage, but some cases may arise from a polio-encephalitis corticalis. This is more probable if the onset is attended with high fever and convulsions. Traumatism is an important factor in the causation of meningeal hemorrhage during early life, and is particularly frequent during labour. Congenital cases of hemiplegia and diplegia may be due to an early meningeal hemorrhage, or possibly to an early encephalitis. In acquired and congenital cases of hemiplegia and diplegia there may be either porencephalus or a simple arrest of development. If acquired, there would seem to be a history of slow development of symptoms, without predisposing cause. If congenital, there may be a history of traumatism to the mother. In later life, hemiplegia or diplegia associated with a large degree of mental impairment and with contractures points to a general cortical atrophy, sclerosis with secondary degenerations, or to a condition of porencephalus the origin of which it is often difficult to determine.

Concerning the cerebral atrophies of childhood, with especial reference to the operation of craniotomy for imbecility,

epilepsy, and paralysis, Dr. Allen Starr [1] says that craniotomy, or the operation of producing an opening of some extent in the skull, with the object of relieving pressure on the brain or in some unknown manner of stimulating its development, has been proposed and performed in certain cases, which fall into three groups: (1) those of hemiplegia with or without athetosis; (2) cases of mental defects of various grades; (3) cases of sensory defects of different types. Epileptiform seizures of *petit* or *grand mal* type occur frequently in patients who may be assigned to any one of these groups, and may be the particular symptom with regard to which advice is sought. The chief clinical facts of importance in the first group are the time and character of the onset, the degree of spontaneous recovery, and the question whether the epilepsy is of so severe a type as to be dangerous. (See above paper for nature of lesions in these cases.) In the second group, the symptoms are mental rather than somatic:—slowness in learning to talk, want of reasoning power, thought, judgment, or self-control; constant and generally mischievous restlessness. Some children may be bright and precocious, but there is an absence of moral ideas; some are dirty and imbecile. These cases remain incapable of supporting themselves or directing their conduct throughout life, and have to be cared for. Cases of the third group are more rare; they have no motor or mental defects, though they may be the subjects of epilepsy. Many cases of deaf-mutism probably belong to this class.

With regard to the question of operation—the disease is at a standstill, is not dangerous to life, and an operation is not free from danger. It is to be remembered that the brain is capable of growth and development up to the age of 14. Can such development be aided by an operation? Many of the pathological conditions present are such as to admit of operative relief. Study of the pathology shows that the varying symptoms are due to the varying situation rather than to the varying nature of the lesion; the various pathological processes present lead to sclerosis with atrophy of the brain. In clinical cases of the first group, the sclerotic atrophy involves the Rolandic area and motor tracts, and generally the basal ganglia as well. In the second group, the anterior convolutions, or sometimes the entire hemisphere to a greater or less extent, and in the third group the posterior and lateral parts of the hemispheres are involved. In many cases the epileptic attacks are so frequent that any risk might be taken, provided that they could be stopped.

[1] *Med. Rec.*, Jan. 23, 1892.

Dr. Starr concludes that (1) hemiplegia, sensory defects, and imbecility, with or without epilepsy, in children are chronic diseases, incurable by medical treatment. Any means which may be legitimately used to save the patient from a life of invalidism and take the burden of his case from his family are to be employed. (2) The pathological conditions may be either gross defects and atrophies of the brain, or an arrest of development in the cerebral cells, without any naked-eye changes. (3) The pathological condition existing cannot at present be determined without an exploratory operation. (4) Such operations are not without danger, but if made as short as possible, and caution used in opening the dura mater, the dangers may be avoided. (5) When manifest atrophy is present, the result of operation is *nil*. When there is arrested development of the cerebral tissue, it may be useful. When clots, cysts, or tumours are found and removed, the chance of recovery is increased. When the skull is markedly microcephalic from early union of the sutures, the increased space given to the brain by the operation appears to stimulate its growth and development. (6) Epileptic attacks are often reduced in frequency and modified in character by craniotomy. When the opening in the skull remains covered over only by the soft tissues, it appears to act as a safety-valve, allowing changes in the intra-cranial contents to occur without producing pressure upon the brain. (7) While hemiplegia, athetosis, aphasia, and sensory defects have been relieved by operation, it is as yet impossible to predict to what extent imbecility may be thus relieved. (8) Reports of cases should be made in full, and not within six months of the time of operation, as conclusions cannot be trustworthy unless arrived at by long observation.

* * * *

Dr. B. Sachs [1] thinks there is reason to doubt whether the unsuccessful cases of treating epilepsy surgically have been reported with sufficient candour and promptness, and asks the question whether, if the attacks are inhibited for weeks or months, this temporary success is to be put to the credit of the operation, seeing that in 1875 Maclaren pointed out that there was apt to be temporary improvement after any operation of whatever sort. Probably some of the supposed cures after ovariotomy may occur in this way. Epilepsy being a symptom only, great importance is to be attached to the discovery of the cause which exists in many cases, *e.g.* a

[1] *New York Med. Journ.*, Feb. 20, 1892.

long-forgotten accident or injury. Féré and Chaslin, in five cases of epilepsy, found in all increase of neuroglia tissue, a secondary sclerosis of the cortex associated with epilepsy.[1] In idiopathic epilepsy the initial causal lesion is not determined, but in cases of Jacksonian epilepsy—in which we operate—due to focal disease, of traumatic or other origin, the focus of disease is present, together with a secondary sclerosis. In time the focal lesion may disappear, but the secondary sclerosis can be recognised. In early childhood meningeal hemorrhage may give rise to secondary changes (lobar sclerosis) in the cortex; the same process occurs in traumatic meningeal hemorrhage. The chief symptoms are paralysis and epilepsy. This secondary sclerosis may be the source of irritation, and the diseased area constitute a discharging centre; the neglect of careful microscopical investigation of the cortex accounts for the absence of the demonstration of sclerosis in cases of traumatism. There is thus the initial focal lesion and the secondary sclerosis to be dealt with: we have to prevent the development of secondary sclerosis or to neutralise its effects. For the first indication, we can only, in our ignorance of the exact conditions of the development of sclerosis, act by removing or diminishing the initial lesion, which means an early operation in cases of traumatic or organic disease. The only known method of fulfilling the second indication is by excision to rid the brain of the sclerosed areas. Excision means loss of the functions of the excised centre; but this is often recovered from in young subjects, and most patients would prefer paralysis to epilepsy.

Practical Conclusions.—(1) In a given case of traumatic or organic lesion, operate as early as possible, to prevent the development of secondary sclerosis. (2) Onset of epilepsy is a warning that sclerosis has been established; if not before, operate now, to avoid an increase of this trouble. (3) Excision is the only rational operation, and if other centres are not in an irritable condition it may be completely successful. Traumatic cases are of immediate interest; if there is any doubt as to depression of bone, it is best to trephine, to make sure. In cases of traumatic epilepsy, in which there is no old scar and no depressed bone, and yet improvement follows operation, the improvement is probably to be attributed to the relief of increased pressure due to adhesions between the

[1] The reader may be referred to Bevan Lewis's researches on the morbid changes in the cortex in epilepsy. *A Text Book of Mental Diseases*, pp. 522–528.

brain and its coverings, or to traumatic cysts. The trephine opening should be made as large as possible. The drawbacks to operation lie in the paralysis which results after the excision of cortical centres, and to failure of the operation from the fact that secondary sclerosis has spread to neighbouring cortical areas, which have thus become discharging centres. The cicatrix of the operation may also have an injurious effect on the cortex. The author considers that the cerebral palsies of children, complicated with epilepsy, are the cases of non-traumatic epilepsy, which demand surgical interference. Simple trephining is more often successful in these than in traumatic cases, on account of the frequency with which cysts occur. Excision of cortical centres is also less serious in children, because other portions of the cortex may take on the functions of the part removed. He thinks that if these cases of infantile cerebral palsy were more generally recognised and the tendency to epilepsy checked, the total number of epileptics would be notably diminished.

Dr. Hayes Agnew, whose death we have now unfortunately to lament, had, in the *University Medical Magazine* for October, 1891, a paper on "The Present Status of Brain Surgery," based on the experience of Philadelphia Practice. In 57 cases trephining was done for traumatic epilepsy. Of these 57 cases, 41 recovered from the operation, 4 died, while in the remaining 12 the result is unknown. The ages varied from 7 to 49 years. The mortality did not exceed 7 per cent. 32 cases experienced temporary benefit; 9 obtained no relief; 4 passed out of observation; 4 were operated on too recently to express any opinion; 4 were cured, and 4 died. The author concludes that traumatic epilepsy is practically incurable by surgical operations, and that a considerable number of such cases had better be relegated to the domain of pure medicine. But he believes that a certain number of patients in this class, with whom internal remedies have no controlling influence on the fits, may with propriety be operated on as a palliative measure. He assumes that surgery is responsible for the great majority of traumatic epileptics, and the old doctrine that depressed fractures of the skull without symptoms require no operative interference has, in his opinion, been the cause of very many of the unfortunate sequelæ of head injuries.

M. Chas. Audry reports the interesting case[1] of a little boy of seven months, who had a spina bifida, in the sac of which an ulcerated opening formed, which was followed by

[1] *Prog. Méd.*, Feb. 27, 1892.

the discharge of clear fluid and subsequently of pus, after which the opening closed. Soon afterwards the head began to enlarge, and an enormous chronic hydrocephalus developed. An attempt to reopen the sac of the spina bifida failed, and the skull was then trephined in the right parietal region and a horsehair drain passed into the ventricle. Death took place some hours later, the child's temperature being 105.8° F. In his remarks on the case the author quotes two cases of hydrocephalus by A. Broca,[1] in which trephining and draining of the ventricles was practised. Other cases alluded to are three by Keen: in one the operation was performed for dropsy of the ventricle, due to a cerebellar tumour, and death occurred after 45 days; in the second, of chronic hydrocephalus, death took place on the fifth day; the third patient, who was suffering from tubercular meningitis and was operated on *in extremis*, lived four hours. Mayo Robson, in the case of a child with suppurating otitis and paresis of the arm, in addition to other cerebral symptoms, trephined over the arm centre, and not finding pus, punctured the lateral ventricle; recovery took place. In another case of hydrocephalus, following the cure of a spina bifida by injection of Morton's fluid, he drained the ventricles, and death occurred on the seventh day. M. Phocas, who has also reported one case in which he performed this operation, lost his patient at the end of eight days. Out of six cases in which trephining with drainage of the ventricles has been performed for chronic hydrocephalus, five have therefore died.

J. Michell Clarke.

SURGERY.

Of late years few subjects have been more investigated and experimented with by surgeons than the various means of uniting two divided portions of intestine. Bishop[2] has collected no less than thirty-three distinct methods of doing this, but those in present use may be divided into three: first, the end-to-end method, in which the edges of the cut bowel are somewhat turned in, so as to bring two peritoneal surfaces into contact; second, the method of intestinal anastomosis, by which the walls of two portions of bowel are approximated at some convenient point, and then sutured together with Senn's decalcified bone plates; and third, the method of invagination, founded upon those cases which

[1] *Rev. de Chir.*, Jan. 1, 1891. [2] *Med. Chron.*, Sept., 1885.

have been occasionally observed where recovery has ensued after an intussusception, owing to the intussuscepted bowel having become firmly united to the portion of bowel enclosing it.

It is not yet by any means certain which is the best of these methods, but the following papers are well worthy of consideration.

Under the title of "A New Method of Intestinal Surgery," Dr. H. Widenham Maunsell, lecturer on surgery in Otago University, New Zealand,[1] describes his method of uniting the divided ends of intestine after resection of a portion. He first clamps the bowel to be excised by placing a small flat sponge across the intestine, about four or six inches from the part to be excised, and then transfixes the sponge and the mesentery close to the gut with a strong safety-pin. The pin is then passed again through the sponge on the other side of the gut and clamped. The sponge should be sufficiently large to compress the intestine against the pin, so as to effectually prevent extravasation of the contents. The advantages of this method are its extreme simplicity, its easy applicability, its innoxiousness, and its efficiency. The pressure can be regulated by the size of the sponge. When the entire circumference of the gut is involved in the wound, the bowel must be invaginated so as to bring the encircling peritoneal surfaces into accurate juxtaposition all around, and then sutured in that position. The two ends of the bowel are first brought together with two temporary sutures passed through all the coats of the intestine. The long ends of these sutures are left intact. One is placed at the mesenteric attachment of the gut and the other exactly opposite. These temporary sutures secure the complete peritoneal covering of the mesenteric attachments of both segments of the gut, help to maintain the proper relative position and accurate coadaptation of the two cut ends, and facilitate their subsequent invagination through the opening made in the larger segment of gut. An opening is then made in the larger segment of the gut, through which the invaginated ends of the divided bowel are dragged by the long ends of the temporary sutures. The edges of this opening in the bowel, which should begin about an inch from its transverse section, should be afterwards well turned in and brought together with a continuous suture passed through the peritoneal and muscular coats only. The description of the method can only be properly understood by a careful study of the series of excellent diagrams which

[1] *Amer. Journ. Med. Sci.*, March, 1892.

accompany the article. The author concludes by some remarks on the simplicity of the operation and the universality of its application to all parts of the intestinal tract. He says it is the only operation as yet devised where rapid circular enterorrhaphy (the sutures passing through all the coats of the bowel, leaving the knots on the inside) can be accomplished. The most important element of success, next to the efficiency of the operation, is its speedy performance. After the bowel to be resected has been isolated with the sponge clamps, circular enterorrhaphy can be accomplished in ten minutes, which is less than half the time required for lateral apposition (intestinal anastomosis) with decalcified bone plates. Horsehair or fine silk-worm gut is recommended as the best material for the sutures.

Mr. F. B. Jessett[1] gives a description of a method of performing enterorrhaphy which he has been led to adopt after numerous experiments on the cadaver. He uses two tubes of decalcified bone, one of which he calls the male tube, and the other the female. The male tube consists of two parts: the cylindrical portion, which is fastened into the proximal end of the intestine; and the spur, which slides into the female tube. The latter is of a conical shape, and measures one inch and a quarter in length; it is inserted into the distal portion of the intestine. Both tubes are fixed to the respective portions of bowel by chromic gut, passed through holes made for the purpose in the bone tubes. The two divided ends of intestine are now approximated by passing the spur of the male tube into the female, and they are tied in this position by the threads attached to the tubes. The surgeon next steadies the proximal end of the intestine over the tube between his left thumb and finger, while with the thumb and finger of the right hand he gently slips the distal part of the intestine over the proximal for a quarter to half an inch. He then, with four quilt chromic gut sutures, fastens it in place, being careful to insert one suture on each side of the mesenteric border.

It is of importance that the tubes should slip quite easily into the intestine, as if they fit at all tightly there is much more difficulty in invaginating the one portion of intestine over the other; moreover, there is the risk of gangrene, as the tubes may swell somewhat after their introduction. Six experiments upon dogs were performed by Mr. Jessett, with the assistance of Dr. Morotti of Milan, at the laboratory of the Royal Colleges of Physicians and Surgeons. The first

[1] *Brit. Med. Journ.*, April 2, 1892.

experiment failed, on account of the tubes being too large and causing compression; but the others were all successful.

Mr. Frank T. Paul[1] points out that the operation of enterorrhaphy, as described by him[2], embraces all the salient points of Mr. Jessett's operation. The modifications used by the latter are: (1) the use of two bone tubes instead of one, these being also longer and heavier than those used by Mr. Paul; (2) the greater number of threads used. Mr. Paul considers these modifications to be no improvements.

The same surgeon reported to the Clinical Society of London, at its meeting on May 13th last, a successful case of his own operation.[3]

The patient was a woman, aged 37, in whom a strangulated hernia had gone unrelieved for at least six days. The bowel was sloughing, and had to be excised. It was reunited by the method of invagination referred to above. The patient was fed freely with fluid nourishment from the first. Solid food was commenced, in the form of bread and milk, on the sixth day, and meat on the fourteenth day. On the eighth day the bowels were well moved by glycerine enema, and subsequently at intervals of a few days. The pulse and temperature remained practically normal, and there were no symptoms worth recording. In three weeks she was allowed up, and at the end of a month left the hospital quite convalescent.

In connection with the same subject, Mr. Arthur E. Barker[4] records a second successful case of gastro-enterostomy. The operation was done for carcinoma of the pylorus, which had given rise to great emaciation, and threatened death by starvation. The stomach was first washed out with large quantities of hot water, followed by a solution of salicylate of soda, ten grains to an ounce. A 4-inch incision was made in the middle line, above the umbilicus, and all bleeding points having been checked, the peritoneum was opened. The growth was immediately seen beneath the wound, seated in the anterior wall of the stomach, its centre being about one and a half inches from the pylorus.

The anterior wall of the stomach having been caught up and held by an assistant, was then opened by an incision about one and a half inches long, and a similar incision made in the jejunum about twelve or fifteen inches from its origin. Senn's plates were then inserted, and brought together by silk sutures in the usual way. The walls of the viscera were

[1] *Brit. Med. Journ.*, April 9, 1892. [2] *Lancet*, vol. i., 1891, p. 1196.
[3] *Lancet*, May 21, 1892. [4] *Brit. Med. Journ.*, Jan. 9, 1892.

afterwards sutured round the plates by continuous sutures of fine silk. The junction now seemed secure, and after careful toilet of the surrounding parts, the wound was closed in the usual manner by hard twist silk.

The operation lasted 48½ minutes, and the patient recovered well. No food was administered for 21 hours, and then a teaspoonful of peptones was given by the mouth every two hours, and a peptonised beef and milk suppository every six hours, alternately with an injection of plain hot water every six hours, only five ounces at a time.

The dressings were removed in ten days, when the wound had healed. The patient lived six weeks after the operation, and then died of acute pneumonia at a convalescent home. At the *post mortem* examination it was found that good union had taken place between the stomach and jejunum, while a circular aperture, five-eighths of an inch in diameter, existed between them. The mucous membrane of the stomach and bowel were continuous over the margin of the aperture, and no line of demarcation could be detected. Nothing could be seen anywhere of Senn's plates. There was no tendency to kinking of the jejunum at the attached point, and no obstruction to the flow of contents at the point attached to the stomach.

W. H. Harsant.

OBSTETRICS.

German obstetricians, whose contributions to the science and art of midwifery are so many and so noteworthy, insist with much force upon the danger to the mother when the attendant makes frequent vaginal examinations. Dr. Julius Rosenberg [1] summarises these opinions, and endorses them with great emphasis. He pleads for the management of labour without internal examinations, which should be resorted to only in doubtful cases. He maintains that by abdominal palpation and auscultation we can say if labour has commenced, and can discover the position of the child and the presenting part, and the other conditions which denote the stage of the labour. Dr. Rosenberg says that if everything is found to be normal, it is only frivolous curiosity which can subject the woman to the danger of a vaginal examination. Many will, however, think that this is carrying an attempted prophylaxis needlessly far, and will doubt whether in those cases in private practice in which a

[1] *Med. Rec.*, Jan. 23, 1892.

condition of anæsthesia is not maintained, the maternal appeals for help could be usually satisfied by the negations of this method. Anyway, Dr. Rosenberg is right in demanding that the student should be more thoroughly taught the method of abdominal palpation than is commonly the case.

Dr. Rosenberg protests against the routine practice of vaginal douches, and from a large number of cases quotes figures to show that the mortality is increased where it is adopted.

* * * *

Another shock to the security felt by the use of the perchloride of mercury as an antiseptic is conveyed to us by a communication from Dr. Howard A. Kelly,[1] of the Johns Hopkins University. Dr. Kelly, whilst acknowledging that instruments and dressings can easily be made thoroughly aseptic, considers that sufficient attention is not paid to the surgeon's hands. He made a series of sixty-five experiments, consisting of cultures taken from the epidermis of the hands both before and after using certain disinfecting agents. Germs developed freely after the application of a solution of the perchloride as strong as 1 in 500, but there was little or no development after the employment of permanganate of potash, which, if used in the way he recommends, Dr. Kelly considers to be the most efficient germicide in our possession. But the weak solutions upon which reliance is so commonly placed are powerless, and the salt must be used according to the following method:

(1) The hands must be scrubbed for ten minutes in water, frequently changed, at about 104° F. Special attention must be paid to the nails.

(2) The hands must be immersed in a saturated solution of the permanganate until every part of the hands and lower forearms is stained a deep mahogany or almost black colour. They are then transferred at once to a saturated solution of oxalic acid until completely decolourised, and of a healthy pink colour.

(3) The oxalic acid is to be washed off in warm sterilised water.

Dr. Kelly says that by this simple process the hands are rendered more nearly absolutely aseptic than by any other known means.

For gynæcological or other operations this process may

[1] *Amer. Journ. Obst.*, Dec., 1891, p. 1414.

perhaps be called "simple," but it is doubtful if it is practicable in ordinary midwifery work. Happily Dr. Kelly speaks well of the disinfecting powers of soap and water freely used, and allows that the perchloride inhibits further growth of the coccus until the salt is precipitated or removed, and for this accoucheurs must be grateful.

An authoritative code of "Rules for the Use of Antiseptics in the Practice of Out-door Maternities"[1] has been issued by the committee of the General Lying-in Hospital, York Road, Lambeth, and might with advantage be studied and remembered by all engaged in the practice of midwifery.

* * * *

Most practitioners are alarmed when they find a considerable rise in the temperature of a woman recently confined; and they begin to fear that it is the beginning of a septic trouble which may not improbably end in death, or, at best, in a tardy convalescence. But in many cases a condition of pyrexia is transient, and not the result of wound-infection or of dangerous complication. Dr. J. Chalmers Cameron[2] points out, with much clearness and care, that temporary elevation of temperature may be caused by emotional disturbances, or reflex irritation; and he gives many practical details, attention to which may save the attendant much needless anxiety.

On the subject of puerperal septicæmia, there were two interesting papers at the meeting of the British Gynæcological Society at Newcastle-on-Tyne last year. Dr. Oliver narrated his experience of twenty-five cases which he had seen in the preceding eighteen months; and Dr. Dolan gave the results of his practice, which consisted of 3,453 cases of confinements attended without antiseptic precautions, and in which there were only two cases of septicæmia. The papers in full, and the discussion which followed, are reported in the *British Gynæcological Journal* for November, 1891.

Dr. J. A. G. Hamilton,[3] reviewing 1,000 consecutive cases in his practice from 1883 to 1890, said that he had had no case of septicæmia, and that he had not adopted any elaborate antiseptic precautions beyond cleanliness and boiling of any instruments used. In all cases in which it had been necessary to introduce the hand into the uterus he had washed out the cavity with some antiseptic solution.

[1] *Brit. Med. Journ.*, Feb. 6, 1892, p. 313.
[2] *Internat. Clinics*, vol. i., 1891, p. 164.
[3] *Australas. Med. Gaz.*, April, 1892, p. 183.

Mr. Melville Jay[1] records notes of the last thousand cases he had attended. One death from septicæmia had occurred. The only antiseptics he used were hot water for hands and instruments and an antiseptic lubricant. When the labour is over he thoroughly cleanses the patient.

* * * *

Dr. N. W. Rand[2] considers that the old plan of preserving the perineum by digital dilatation of the vaginal orifice has been too much neglected. He believes that, if given a fair trial by using two fingers and making steady traction back toward the coccyx, it will be found more efficient than any of the other methods that have been suggested, and infinitely less unpleasant to doctor and patient than the much-vaunted practice of directing the head forwards by means of two fingers in the rectum. But Dr. Rand's advice violates the principles of the antiseptic treatment, and cannot be recommended.

* * * *

Dr. William Goodell,[3] discoursing on a case in the Clinic of the Hospital of the University of Pennsylvania, demonstrated the importance of thorough intra-uterine dealing with the placenta in cases of miscarriage. Six months before the patient came under treatment she had a miscarriage at three months, and from that time had a constant, but inodorous, bloody discharge, with several severe hemorrhages, producing marked constitutional effect. With strict antiseptic precautions, the interior of the uterus was explored, and it was then shown that the curette, useful as it is for scraping off fungous vegetations and other small growths, was an inefficient instrument for the separation even of the small attached placenta, which was then removed by a half-twist with a small fenestrated polypus-forceps. The bleeding was stopped by the injection of a syringeful of hot vinegar. Dr. Goodell lays stress on the duty of removing the placenta at the time of the miscarriage, and thinks this is best done either by the forceps or the index-finger.

The profession is not, however, of one opinion as to the treatment of abortion. The subject was discussed in the New York Academy of Medicine[4] on November 18th, 1891. Dr. H. G. Locke described the practice at Roosevelt Hospital, in which nothing is left to Nature, but an operation for

[1] *Australas. Med. Gaz.*, April, 1892, p. 188.
[2] *Med. Rec.*, Dec. 5, 1891, p. 677. [3] *Internat. Clinics*, vol. i., 1891, p. 190.
[4] *Med. Rec.*, Jan 16, 1892, p. 78.

emptying the uterus is carried out with all the precautions of a major abdominal operation. Dr. R. A. Murray thought the treatment too complex for private practice. He considered that, short of hemorrhage or sepsis, there was no need for interfering with the uterus. He deprecated the hospital training of men in methods which they could not use in outside practice. Other speakers considered intra-uterine treatment uncalled for in most cases.

Not only is there usually grievous domestic disappointment about abortions, but the health of the mother is often seriously undermined. It behoves the practitioner to thoroughly investigate the causes of an abortion, in order, if possible, that another one may be prevented. Schuhl has given considerable attention to this question (*Annales de Gyn.*, May, June, and July, 1891).[1] Among the very numerous etiological factors of repeated abortion, he considers that uterine affections—especially retroflexions—and syphilis are of especial importance.

* * * *

Following a paper by Dr. Gustav Zinke, before the Cincinnati Academy of Medicine, on "Two Cases of *Post-partum* Hemorrhage," there was an interesting discussion,[2] in which the balance of opinion was against tamponading the uterus with iodoform gauze, although the practice has received commendation by high authority. Some speakers bore strong testimony to the value of vinegar in restraining hemorrhage that occurs after removal of the placenta, and recommended that a tumbler of vinegar should be always within reach, and that a handkerchief or some strips of muslin should be dipped in it, and, if need be, passed into the uterus.

* * * *

The work of inducing respiration in cases of pronounced asphyxia in the new-born infant is often tedious and disappointing. Dr. W. E. Forest[3] of New York says that of the various methods recommended only three can be shown, by careful trial and experiment, to be of any practical service in introducing an appreciable amount of air into the collapsed lungs. These are: (1) Sylvester's well-known method; (2) Schultze's swinging method, to which reference was made in the *Journal* for June, 1891; and (3) the introduction into the trachea of a catheter, by means of which air is blown in

[1] A very full abstract of his communication is given in the *Amer. Journ. Obst.*, Feb., 1892, to which reference should be made for details.

[2] *Cincin. Lanc.-Clin.*, Feb. 13, 1892, p. 212. [3] *Med. Rec.*, April 9, 1892.

directly from the mouth or the bellows. Dr. Forest reviews in detail the advantages and disadvantages of these methods, and concludes that in bad cases neither of them can be trusted. He considers that the plan which he has practised in some cases that he records is not only efficient, but is free from the dangers incidental to the other methods. His directions are as follows:

1. Lay the child on its face for an instant with the head and thorax lower than the pelvis, and make quick, but not violent, pressure on the child's back. This is done to expel any fluids that may have been drawn into the child's mouth while passing through the pelvic canal.
2. Place the child in the sitting posture in a pail or tub containing six to eight inches of water, as hot as can be borne comfortably by the operator's hand. The child is supported in this position by one of the operator's hands across the child's back, the child's head bent back, and resting in the crotch between the thumb and forefinger of this hand. The child's hands, with the palms to the front, are held in the other hand of the operator.
3. The child's hands are carried upward until the child is suspended by the arms, the buttocks just raised from the bottom of the pail. The child's head now falls back, and the operator leans forward, and, mouth to mouth, blows into the child's lungs.
4. The child's arms are then lowered until the hand of the operator holding them rests across the front of the child's thorax. Then the body of the child is doubled forward, and, at the same time, its thorax is compressed between the operator's hands—one in front, the other behind. This expels the air from the lungs, and completes the movements.

* * * *

The profession in the Leeward Islands has for some years been striving to get an improved class of midwives, and has, from time to time, appealed to the authorities to secure this, but hitherto without success. Last year Mr. A. P. Boon[1] brought the question before the recently-formed Leeward Islands Branch of the British Medical Association, which he easily persuaded to pass the following resolution: "That this branch of the British Medical Association is of opinion that provision should be made for the proper educa-

[1] *Leeward Islands Med. Journ.*, 1891, p. 121.

tion, licensing, and registration of the midwives in this colony, whereby the mortality among lying-in women and their infants would probably be much reduced."

Last year also the North Queensland Medical Society, after hearing a paper by Dr. W. B. Nisbet on "The Education of Midwives," [1] unanimously resolved: "That the time has arrived when the indiscriminate practice of midwifery by untrained nurses should be discouraged in the towns in the colony, and provision should be made for educating suitable women to become certificated midwives." From India comes the same note. Mr. P. S. Mootooswamy, of Tanjore, recording some "Contributions to the Practice of Midwifery," [2] takes occasion to put in a plea for educated and trained midwives to supplant ignorant and untaught women in the attendance on women belonging to the poor and labouring classes in that country.

The mother country must not be behind its colonies in safeguarding the life and health of the class of women who will, so far as can be seen at present, have to be always attended by midwives, and Parliament could scarcely do anything more practically useful than pass a well-considered Act which would prevent women taking up the practice of midwifery till they had shown to some competent authority that they possessed the knowledge necessary for the work.

It is satisfactory to note the appointment of a Select Committee on the Midwives' Registration Bill now before the House of Commons. Although this Committee began taking evidence [3] on May 13th, the state of public business does not promise much real progress with the question. Less important matters must first be settled.

L. M. Griffiths.

LARYNGOLOGY AND RHINOLOGY.

To arrive at an accurate diagnosis of disease of the antrum is sometimes a difficult matter. The method of exploration and irrigation of this cavity suggested by Lichtwitz [4] promises to be of value in this connection. The instrument to be used consists of a straight trochar, having a diameter of one millimètre and a half with a length of ten to twelve centimètres, in a steel cannula. After the nostril has been cleansed by means of an antiseptic douche, and the

[1] *Austral. Med. Gaz.*, June, 1891. [2] *Ind. Med. Gaz.*, August, 1891.
[3] *Brit. Med. Journ.*, May 21, 1892, p. 1092.
[4] *Journ. Laryn. & Rhin.*, Dec., 1891., p. 485.

inferior meatus cocainised, puncture of the antrum is made in the following manner: the instrument is passed into the nose as far as the middle of the inferior meatus, and the point, which is directed as much outwards and upwards as possible, is then pushed through the thin inner wall of the antrum. Syringing through the cannula drives out the fluid contents of the antrum through the normal opening, and they can thus be examined by sight and smell.

As we all know, pus in the antrum is usually produced by a carious condition of a molar tooth, and Luc [1] has asserted that dental suppuration *always* starts the abscess. He has, however, published two cases,[2] in one of which no injury to the molar teeth could be discovered until extraction of the first one revealed old alveolar dental periostitis; and in the other case there was merely a small superficial cavity in the crown of the first molar, but the same condition of the fangs was seen on extraction. Whenever a patient consults us for discharge of pus from the nose, we ought to first inquire, Is it unilateral or bilateral? If the former, and if coming from under the middle turbinated bone, it is pretty certainly of antral origin. We shall usually find that there has been toothache, and we often see a decayed or dead first molar, but absence of the dental signs does not negative the diagnosis of antral mischief.

* * * *

Dr. Middlemass Hunt [3] has published two cases, showing how very important is accurate examination of the interior of the nose. They were cases of common cold, spreading to the accessory sinuses, and giving rise to the characteristic symptoms, which were very severe as regards pain. There was discharge of foul-smelling pus from one nostril, and on examination this was found to be packed with stinking cheesy pus, which was prevented from making its exit by a hypertrophied fold of mucous membrane springing from the external wall, just in front of the middle turbinate. Antiseptic irrigation, scooping out the pus, and application of the galvano-cautery to the hypertrophied valve-like flap cured what was looked on as a most serious condition.

I have dealt with one or two cases of a similar kind, and find that it is absolutely necessary that the discharge be removed by the medical attendant until it is *easily* got rid of by the nasal syringe. I insist on my patients getting an instrument the nozzle of which is pierced with five holes, so

[1] *Arch. de Laryn.*, 1890, pp. 145–204.
[2] See *Journ. Laryn., Rhin., & Otol.*, Jan., 1892, p. 38. [3] *Ibid.*, p. 1.

that the stream of water radiates in a fan-like manner, and cleanses the whole cavity thoroughly. The galvano-cautery, chromic acid, or the snare must be used to get rid of the flap that is causing the retention of foul secretions.

* * * *

At a meeting of the Society of Laryngology and Otology of Paris, held on November 6th, 1891, Dr. Gellé [1] reported a case in which suppurative otitis and cerebral symptoms supervened after posterior tamponing for severe epistaxis. The ear and brain mischief was caused by the retention of putrid clot in the tampon, and it is a thoroughly practical and important point to remember that this may take place. It is in reality very rarely necessary to plug the posterior nares for epistaxis, as the blood almost always issues from the anterior part of the septum; and I have seldom failed to find the bleeding point, and plug it effectually by means of a bead of chromic acid melted on the end of a nasal probe, and applied to the spot whence the blood is issuing. Dusting the septum over with iodoform, or the application of a plug of iodoform cotton wool, promotes healing of the little wound, and is the only scientific and safe way of treating this trouble.

* * * *

At a meeting of the same Society, on December 4th, 1891, Dr. Albert Ruault [2] read a paper on "Superficial Submucous Phlegmon of the Base of the Tongue." The symptoms of the affection are malaise, headache, shivering, and fever lasting four to seven days, pain in the throat, shooting into the ears; in some cases, hoarseness and dyspnœa. There is no swelling of the neck and no glandular enlargement. The patient can open the mouth widely, and the faucial tonsils not being swollen, we must examine with the laryngoscope. The appearances of the lingual tonsil are those of the faucial tonsil when inflamed; viz., redness, swelling, and, if suppuration has supervened, spots of pus on its surface, with, in most cases, œdema of the epiglottis. The abscess opens only after several days, or, if there be merely non-suppurative inflammation, it gradually recedes. The treatment consists in scarification or deeper incision, antiseptic gargles, and poultices.

I have had two such cases under my care, in one of which the lingual tonsil was as large as a hazel-nut, red and shiny in appearance, and intensely painful, but it could only be seen with the laryngoscopic mirror, and it gradually receded;

[1] See *Journ. Laryn., Rhin., & Otol.*, Jan., 1892, p. 40.
[2] *Ibid.*, March, 1892, p. 135.

in the other it opened laterally, and discharged a large quantity of pus. When we get a patient suffering from pain in the throat, the origin of which we cannot see on looking into the mouth, we ought on no account to omit the use of the laryngoscope. This is a golden rule which ought never to be forgotten.

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At a meeting of the British Laryngological and Rhinological Association, held on March 25th, 1892, Dr. Sandford[1] opened a very important discussion on the necessity of systematic voice-training in public speakers. He brought forward the extremely common, and therefore interesting, case of a clergyman endowed by Nature with a vigorous, powerful vocal organ, but who, through faulty use, had got it into such a state of hyperæmia and debility as to imperil his carrying on his vocation. All of us who are examining throat cases constantly meet with just such patients every day. We can cure them as long as they rest their voices; but unless we insist on their putting themselves under a voice trainer they are certain to return to us as bad as ever after a few months of voice use.

Dr. Davies showed his little boy, who had been stammering a good deal after whooping cough, and who was cured by removal of adenoids, shortening the uvula, and a course of voice training of three months' duration. Dr. Matheson referred especially to stammering, and very rightly laid much stress on the necessity for accurate examination and treatment of the nose and naso-pharynx, abnormal condition of which probably accounts for 50 per cent. of all cases. Mr. Behnke related particulars of a case, showing that it is useless to attempt to cure stammering unless large tonsils, adenoids, and such abnormalities are first of all removed by the surgeon. Then he trains the action of the diaphragm by a suitable "diaphragmatic drill." Lastly, the confidence—nay, the affection—of the pupil is to be gained. Mr. Lennox Browne insisted on the importance of properly carried out diaphragmatic action, as opposed to any muscular effort which raises the clavicles, in order that the voice should stand wear and tear. He pointed out that the French method of voice production led to the unfortunate fault known as "vibrato," or "tremolo," and that the voice more quickly fell to pieces from the fact that the diaphragm was inefficiently trained.

Altogether the discussion was most valuable, as all who are consulted by voice users will readily admit.

BARCLAY J. BARON.

[1] *Journ. Laryn., Rhin., & Otol.*, May, 1892, p. 215.

Reviews of Books.

Railway Injuries: in their Medico-Legal and Clinical Aspects. By HERBERT W. PAGE. Pp. 148. London: CHARLES GRIFFIN AND COMPANY. 1891.

A new book by the author of *Injuries of the Spine and Spinal Cord and Nervous Shock*, which threw so much fresh light on these maladies that were till then so ill-understood, will be taken up with expectations in which its careful reader will not be disappointed. Mr. Page has the satisfaction of finding that the views which he then expressed as to the nature and pathogeny of these affections, and which were in strong divergence from those most widely prevalent at that time (1883), have met with general acceptance not only in this country, but by foreign writers also. His subsequent experience has served to confirm his former opinions. The change of view that has taken place with regard to the real nature of the nervous symptoms produced by a severe accident, and the paramount importance that is now attributed to the influence of "nervous shock," is not the least remarkable of the recent advances in neurology. Whereas the older writers looked for the cause of these symptoms in morbid changes of greater or less intensity, produced in the central nervous system by concussion or some similar agency, according to the modern view they are due, not to organic changes, but to functional disturbances, in which the psychical element plays an important part, acting by means of the condition of "nervous shock" that is evoked by the general consternation that follows upon the appalling suddenness and attendant horrors of a bad railway accident. Further, the researches into the nature of the nervous malady excited by traumatisms have shown that in many cases it is identical with hysteria arising from other causes. As a matter of fact, Mr. Page finds actual organic lesions of the spinal cord to be rarely produced, although painful bruises and sprains of the spinal ligaments and muscles may easily lead, unless due

care be taken, to mistakes in diagnosis. The book contains a wealth of apt clinical illustrations drawn from the author's large experience in these cases. The subject of the influence of litigation for compensation on the progress of an illness brought about by a railway accident, and the manner in which it may retard recovery in cases in which there is no reason to doubt the *bona fides* of the patient, and the other important one of the detection of malingerers, are very ably considered. If all practitioners were possessed of the knowledge that is accessible to them in this book, we should not so often find those unfortunate differences of opinion amongst medical witnesses in suits for damages against railway companies, which stultify the profession in the eyes of the public. We have said enough to indicate the interesting nature of the subject which Mr. Page treats in a singularly lucid and able manner, and can only add that his book is one to be read and digested.

The Proclivity of Women to Cancerous Diseases, and to Certain Benign Tumours. By HERBERT SNOW, M.D. (Lond.). Pp. 58. London: J. & A. CHURCHILL. 1891.

We are informed by the title page that this is the substance of a lecture delivered at the Cancer Hospital, on February 6th, 1891; but after carefully reading it, we cannot discover in what way it advances our knowledge of the etiology of cancer. The author's opinion seems to be, that whisky-drinking and smoking are the principal causes of cancer in the male, and that constipation, tight lacing, tea-drinking, and overpressure at school have very much to do with the same result in the female. In his view, all the phenomena of cancer-development are phenomena of cell growth, and all questions of causation resolve themselves into the single one of what stimulates or irritates the cell-elements in a particular area. He considers that the frequency of cancer of the uterus is due to menstruation, "that proud privilege of woman, due to the assumption, by her kind, of the erect position."

We are afraid that we have yet more to learn than the author can teach us, before we can understand anything of the causation of cancer.

Lead Poisoning in its Acute and Chronic Forms. By THOMAS OLIVER, M.A., M.D., F.R.C.P. Pp. 121. Edinburgh: YOUNG J. PENTLAND. 1891.

This book consists of the Goulstonian lectures for 1891. The subject of plumbism is of great importance from its prevalence in the community, and it is, therefore, essential that every medical practitioner should be thoroughly acquainted with it. We think that in this work there will be found ample information on the many points of interest and practical importance which are connected with lead poisoning. The author has conducted experiments on the mode of absorption of lead by the digestive tract, and on the effects of the poison on animals. Illustrations of the microscopical appearances found in the organs affected are given in the form of beautiful coloured plates. There are also plates of the ophthalmoscopic changes in the optic disc and retina, and reproductions of sphygmograms. We would suggest that in future editions the nervous symptoms produced by the action of lead should be considered in greater detail, otherwise we have only praise for the clearness of the description and the lucid style in which the book is written.

Prescriber's Companion. By THOMAS SAVILL, M.D., M.R.C.P. 2nd Edition. Pp. 48. London: JOHN BALE & SONS. [n.d.]

This is greatly enlarged from the first edition; it is still small but contains a large amount of valuable information on medicinal and general therapeutics in a small space, and is one of the best of the little books of this kind, which, judging from the supply, meet a wide-spread demand.

Leprosy. By GEORGE THIN, M.D. Pp. xii., 280. London: PERCIVAL & CO. 1891.

The author of this book systematises the knowledge hitherto acquired in relation to the bacillus lepræ, its relations to the pathological changes peculiar to leprosy, and its important bearings on the etiology of the disease. All the

evidence tends to show that "the more complete the investigation into the condition of the nerves, the more certain it becomes that the pathology of anæsthetic leprosy has to do with a special morbid process in the nerves, that this process is characterised by inflammation and consequent destruction, and that the cause of the morbid change is to be found solely and simply in the presence and growth of the bacillus lepræ." It follows that "there are very strong grounds for believing that it is contagious in the same sense in which syphilis and tuberculosis are contagious." Much evidence on this question is adduced, and the author naturally states "that there is at present no means of explaining the existence of the bacillus lepræ—the real cause of the disease—in the body of the leper, except by the assumption that he has acquired the parasite directly or indirectly from the body of another leper."

As regards the etiology of the disease, there is not a single fact to show that the poison of leprosy has been once conveyed by anything that a leper has swallowed. The bacillus lepræ is believed to be an exclusive parasite of man; but otherwise there is a close analogy between it and that of tubercle. They both may gain admission into the human frame without leaving any trace at the point of entrance: they both have an uncertain period of incubation: they both may develop rapidly or very slowly; and in both instances, once admission and development have taken place, the complete extinction of the parasite, if it ever occurs, does so with extreme rarity, although in both instances the parasite may be limited to certain isolated parts of the body, and may live very quiescent over a long period of years, the death of the patient in process of time probably taking place from some other disease.

The book shows that, if medicine can do little for the unfortunate leper, medical knowledge can show peoples and governments how, in leper countries, healthy persons may escape the disease.

Hare Lip and Cleft Palate. By WILLIAM ROSE, F.R.C.S. Pp. xiii., 172. London: H. K. LEWIS. 1891.

The views of Professor Rose on the subject of hare lip and cleft palate ought to be carefully studied by his professional brethren, all classes of whom should find this book interesting and instructive.

Professor Rose deals with the particulars of operative treatment as a surgical artist. Many well-written chapters make up a work which we gladly welcome as a useful and practical addition to our surgical literature.

The volume is well illustrated and carefully indexed.

Outlines of Practical Physiological Chemistry. By F. CHARLES LARKIN, F.R.C.S., and RANDLE LEIGH, M.B., B.Sc. (Lond.). Second Edition. Pp. 86. London: H. K. LEWIS. 1891.

This little book is well arranged, and bears internal evidence that it has been compiled by men who are accustomed to teach the subject, and have a thorough acquaintance with the needs of medical students. We think that the special aim of the book has been attained; namely, "to bring into prominence those portions of the subject which actual daily experience of medical practice has taught us will be most useful to the student in the practice of his profession in after life." As it also satisfactorily deals with the chief pathological constituents of urine, and the examination of the fluids of the body, we are sure that the authors are justified in the opinion they further express, that the "work will be of service to medical practitioners as a handy guide to the examination of various physiological and pathological substances."

Transactions of the New York Academy of Medicine. Second Series. Vol. VII. Pp. 461. Printed for the Academy. 1891.

This volume, which deals with subjects that are almost wholly medical, maintains the high level of excellence which we are accustomed to associate with the New York Academy, and most of the contributions will repay careful study. There are two papers on Abdominal Surgery, and one on the Surgery of the Spinal Cord. We may perhaps, without being invidious, point out the papers which seem to us especially valuable. There is a description of a new apparatus, by Dr. Seibert, for artificial feeding of infants, in which the milk is sterilised in the bottles; the apparatus is of great simplicity, and so cheap as to be within reach of

all. There are papers on Influenza and its most fatal complication, Pneumonia, and an important contribution to the study of Infantile Cerebral Palsy, based on analysis of 140 cases, by Sachs and Peterson. The subject most fully worked out in this book is that of Reflex Neuroses, or peripheral irritation as a cause of nervous affections. The eye, throat, nose, pelvic organs, and teeth are all considered from this point of view. From the omission of the ear, we should conclude that it is not a frequent source of reflex irritation. We may quote Prof. Allen Starr's caution, in his article on Reflex Neuroses in general, that in cases of disease put down to peripheral irritation, the disease may be in the morbid condition of the nervous centre, which is too readily affected by changes at the periphery.

Among the rest are four papers on Hydrophobia and Pasteur's Prophylaxis for Rabies, and two on Optic Neuritis in connection with orbital and intracranial disease respectively.

Psycho-Therapeutics ; or, Treatment by Hypnotism and Suggestion. By C. LLOYD TUCKEY, M.D. Third Edition. Pp. xvi., 321. London: BAILLIÈRE, TINDALL AND COX. 1891.

The Practice of Hypnotic Suggestion. By GEO. KINGSBURY, M.A., M.D. Pp. viii., 206. Bristol: JOHN WRIGHT & Co. 1891.

These two volumes are, with the exception of one by Dr. Felkin recently noticed in this *Journal*, the only books as yet written by English authors on the subject of hypnotism. The former work, which has been greatly added to since its first appearance, is a bulky, fairly clear review of the many observations on, and theories concerning, the nature of the hypnotic state. The latter is, as its title implies, a short practical guide, which may be recommended to those who wish to test for themselves the therapeutic uses of suggestion during hypnosis in certain functional nervous disorders. Both books are of interest and value, in that they give an account of cases treated by the authors; for we have been so dependent on our Continental *confrères* for our knowledge of the subject that most Englishmen who have not seen the hypnotic state class it with theosophic phenomena and Stead's ghost stories.

The Middlesex Hospital: Reports of the Medical, Surgical, and Pathological Registrars for the Year 1889. Pp. 332. London: H. K. LEWIS. 1891.

This volume gives, as usual, a complete record of the work of the hospital during the year, and thus contains a number of valuable clinical and pathological observations. We note that in the report of the surgical registrar the tables of diseases and injuries have been this year arranged in accordance with the nomenclature of diseases recommended by the Royal College of Physicians, and the cases further tabulated according to the results of treatment. In each case where the uterus or its appendages were removed, an account of the pathological changes found in the organs removed is given—an essential adjunct to the clinical record of the case. In his pathological report, Dr. Sidney Martin has given an appendix to the cases of tuberculosis, "classifying those diseases which caused death and in which active or 'healed' tubercle was present."

A B C of the Swedish System of Educational Gymnastics. By HARTIVG NISSEN. With 77 Illustrations. Pp. 107. Philadelphia: F. A. DAVIS. 1891.

Herein is contained a description of the regular series of gymnastic exercises of the Swedish system. The author has had a large practical experience, and has compiled this book for the use of teachers in schools. The well-known advantage of the Swedish system lies in its affording a complete course of muscular exercises for which the use of appliances is unnecessary. Directions are given for the carrying out of graduated exercises, arranged in progressive series from the simple to the complex. These directions are given in the briefest possible terms. This, although in accordance with the practical character of the book, is apt to lead to obscurity in the wording. Generally speaking, the directions are clear; but in some instances it is difficult to make out their precise meaning without prolonged study. We also doubt the exactness of the physiological explanations which are given of the object of some of the exercises. The illustrations are numerous and an aid to the reader. No doubt the book will be found useful by those for whom it has been written.

A Treatise on Practical Anatomy. By HENRY C. BOENNING, M.D. Pp. xvi., 481. Philadelphia: F. A. DAVIS. 1891.

This book has been written especially for students of anatomy and surgery, and the aim of the author has been to arrange the subject so as to make it equally serviceable as a text-book and a dissector. There are now so many well-established text-books on anatomy that an author in bringing forward a new work on the subject ought either to show some new arrangement of material, or else to illustrate it by original diagrams.

The book before us may have some claims on the former ground, inasmuch as the muscles, arteries, and nerves are arranged in the form of very brief tables. This method may enable some students to learn rapidly the main facts, but this must necessarily be at the expense of accuracy and detail. Thus, to take an example, the extensor communis digitorum muscle of the forearm is described in the following words: "Origin—External epicondyle and intermuscular septa. Insertion—Divides into four tendons, which are inserted on the dorsal and lateral surfaces of the first, second, and third phalanges." This description may serve to recall the muscle to a student who has once properly learned it, but would be of little use to one who was dissecting the muscle for the first time, and wished to read an account of it.

The plates are nearly all copied from other well-known works, and many of them are so cloudy and indistinct that it is difficult to understand them. The book is printed in large type, with good broad margins, and is apparently an attempt to make the anatomy of the human subject easy reading.

The Water Cure in the Bedroom; or, Hydropathy at Home. By G. H. DOUDNEY, M.B. Pp. 46. Bristol: JOHN WRIGHT & CO. [1891.]

Hydropathy, relieved of the taint of charlatanism and mystery, is becoming one of the most valuable aids to modern treatment, and although many of the complicated processes used in hydropathic treatment must of necessity be carried out in establishments fitted up for the purpose, much may be done in an ordinary bedroom with simply the

apparatus usually contained therein. This book shows how much may be accomplished in the treatment of simple ailments which commonly do not require medical aid, and its object is a laudable one, that of substituting baths, fomentations, pads, etc., for the domestic drugging which is far too common.

Atlas of Clinical Medicine. By BYROM BRAMWELL, M.D., F.R.C.P., and F.R.S.E. Vol. I. Part III. Pp. 43. Edinburgh: T. AND A. CONSTABLE. 1891.

The subjects dealt with in this part are Progressive Unilateral Atrophy of the Face, Chronic Progressive Bulbar Paralysis, Ophthalmoplegia, Molluscum Fibrosum, and Xeroderma Pigmentosum. The plates of cases illustrating these affections are excellent, and maintain the high standard of the preceding numbers. The letterpress is also good. We think, however, that the account of ophthalmoplegia might be condensed, and that it should be more clearly pointed out what are the usual combinations of paralysis that are seen in practice as distinguished from those that may theoretically occur. On page 125, "splenoidal" is evidently a misprint for "sphenoidal."

The Anatomical and Histological Dissection of the Human Ear in the Normal and Diseased Condition. By DR. ADAM POLITZER. Translated by GEORGE STONE. Pp. xv., 269. London: BAILLIÈRE, TINDALL AND COX. 1892.

Everything that comes from the pen of Dr. Politzer is worthy of perusal, for he is, indeed, a master of his subject; but the book before us is probably the best thing he has ever written, and seems to leave very little to be said on the anatomy of the ear. It gives evidence of the most laborious and painstaking work, and is characteristic of the Teutonic mind. Since the days of Toynbee, very little original work on this subject has been done by Englishmen; and it is to Germans that we look for all recent investigations in normal and pathological anatomy of the ear. We are, therefore, under special obligations to Mr. George Stone of Liverpool for translating this book into such excellent English. The illustrations are nearly all from original dissections made by

the author, and are, many of them, of a beautiful character—not the tinted diagrammatic drawings which so often do duty in text-books of diseases of the ear, but accurate copies of dissections, which may be relied upon to give a true idea of the actual parts. The book will take its place as the best standard work on the subject.

The Pathological Histology of Bronchial Affections, Pneumonia, and Fibroid Pneumonia: an Original Investigation. By A. G. AULD, M.D. Pp. 207. London: J. & A. CHURCHILL. 1891.

This is a valuable contribution to the study of the pathological histology of bronchitis and pneumonia, and will amply repay a careful perusal. It is full of original observations, which are the fruit of much painstaking labour. It is curious that, in spite of the great frequency and importance of bronchitis, observations on the pathological changes in the bronchi are few and inadequate. There will be less reason to complain of this in the future, as the present work in great measure supplies the gap in our literature. The author precedes his descriptions of the pathological histology of the above affections with a short account of the normal structure of the bronchi and lung tissue. Amongst the many interesting features of bronchitis, we may allude to his description of the excessive growth of the glandular epithelium which occurs in the chronic form of the disease. He considers this to be best described as an "atypical epithelial growth," and not as an adenoma. Mention is made of the peculiar band-like formations which traverse the bronchi in cases of bronchiectasis, which are shown to be formed by the growing together of the free ends of papillary outgrowths formed of granulation tissue. On histological grounds the vaso-motor theory of origin of the asthmatic paroxysm is considered to be improbable. Passing on to broncho-pneumonia, the author makes out a fair case for the germination of the fixed connective tissue cells in the alveolar walls, giving rise to a crowd of young cells which pass on into the alveoli, as the typical change in acute broncho-pneumonia, in opposition to the general view that it consists of proliferation of the alveolar epithelium. The latter change, he says, may occur in the chronic form of the disease, but is not characteristic even of this.

A good account is given of the minute changes in the

lung in acute pneumonia. When resolution is delayed, it is shown that there are morbid changes in the alveolar epithelium. The author endeavours to prove, from a careful examination of several cases, that a chronic induration—fibroid change—may arise out of acute pneumonia; the intra-alveolar fibrinous exudation first undergoing fibroid organisation, and the adventitious tissues being secondarily affected; and that, in the second place, there is an affection of the lungs anatomically commencing in the same way as the above—namely, by induration of a creeping fibrinous exudation, by interstitial changes and epithelial proliferation and degeneration, but arising independently of acute pneumonia—this he calls "fibroid pneumonia." In their late stages the profound alterations produced in the lungs probably render these affections indistinguishable from other forms of pulmonary cirrhosis.

The book deserves careful study; and some well-executed drawings of the microscopic appearances, which are given, are a considerable aid to the clear understanding of the descriptions in the text. The book is clearly printed. We do not like to find fault with a work of real merit, and one which we hope will meet with the success that it deserves, but we must say that it is a pity that more care was not taken in the revision of the proof-sheets. Some of the sentences are involved and obscure in meaning, there are many slips in spelling and some in grammar, and other signs of careless revision; for instance, one writer's name is spelt in two different ways on the same page, and in a reference to one of the author's own papers in the *Lancet* the date is given as 1861 instead of 1891. We can recommend the book to our readers, and no doubt in future editions these small errors will be corrected.

Diseases of the Throat, Nose, and Ear. By P. McBRIDE, M.D., F.R.C.P. Ed. Pp. xvi., 640. Edinburgh: YOUNG J. PENTLAND. 1892.

There is no doubt that this book will take a permanent place as a standard work on throat, nose, and ear disease. The author deals especially fully with the diagnosis and treatment of ear disease, and nearly three hundred pages are devoted to this section. Of this we are very glad, as we believe that the man who can examine and treat pathological conditions of the nose and naso-pharynx is more successful

in treating ear cases than the pure aurist, to whom posterior rhinoscopy reveals little or nothing of naso-pharyngeal disease. We have read with much pleasure the valuable practical hints that are given as to syringing and drying the ear; and we agree with the author that Schwartze's caustic treatment is apt to be most mischievous in small perforations. It is also satisfactory to find that the author deprecates operations on the anterior nares and pharynx for the relief of deafness, unless surgical interference is necessary on rhinological and laryngological grounds. Some distinguished specialists are always ready to mutilate their patients' noses by removing spurs, and even pieces of turbinated bones, and a note of warning is useful.

Dr. McBride is a firm believer in the virtues of pilocarpine for labyrinthine disease, and we have seen it do much good, although scepticism is freely expressed by some. "Necrosing ethmoiditis" does not find a place in the index, and the author is evidently not a disciple of Woakes. The influence of influenza on the larynx and ear is well described, and the persistence of pain after discharge from the ear has well begun must now be looked on as *the* symptom of influenza suppurative ear disease. We quite agree with the author that slight hypertrophy of the lingual tonsil gives rise to symptoms in anæmic or hysterical women, who ought to become acquainted with iron in the form of pills rather than as wire made red hot. The reckless way in which the electric cautery is used in these and kindred troubles is most mischievous.

The book abounds in practical hints for examining and treating patients; and although some of the illustrations are not quite so well drawn and coloured as we have seen them in books dealing with throat and nose disease, yet we consider that it is a most valuable treatise, reflecting great credit on author and publisher.

Transactions of the Royal Academy of Medicine in Ireland. Vol. VIII., pp. xl., 535. Vol. IX., pp. xxxix., 516. Dublin: FANNIN & Co. 1890—1891.

These volumes are full of articles on the leading topics of our time, are well worthy of the school from which they emanate, and will well repay the reader for the time expended in their perusal. Each represents the most valuable portion of a year's work done by the fellows and members of the Royal Medical Society of Dublin, and all the world knows how instructive and entertaining they are.

Practical Chemistry for Medical Students. By SAMUEL RIDEAL, D.Sc. Lond. Pp. 55. London: H. K. LEWIS. 1890.

A medical student, who has to present himself for examination under the conjoint board, will find in this small book instructions for testing those simple substances which he would then be required to identify. The details here given would, if mastered, surely create an appetite for more.

Index-Catalogue of the Library of the Surgeon-General's Office, United States Army. Vol. XII. REGER—SHUTTLEWORTH. Washington: GOVERNMENT PRINTING OFFICE. 1891.

We gladly welcome another volume of this gigantic undertaking, for which the profession owes everlasting gratitude to Dr. Billings and his helpers, who have been enabled, through the munificence of the United States Government, to do such vast and useful work. The more we become acquainted with it the more thoroughly we realise how indispensable it is.

Reasons why the Office of Coroner should be Held by a Member of the Medical Profession. By FREDERICK W. LOWNDES. Pp. 34. London: J. & A. CHURCHILL.

The reasons given in this recently-written but undated pamphlet are sound, and if read by those who have the power of election, will no doubt influence their votes in future contests for the office of Coroner. The public at last seem to be taking more interest in the matter of Coroners and their duties, as there are at present two Bills before Parliament proposing to alter "The Coroners' Act of 1887."

"How to Avoid a Hasty Election" will be settled by the Bill (if passed) which was introduced in the Commons by Sir A. Rollit on March 30th last.

The author has inadvertently fallen into error by saying that the newly-elected Coroner for Birmingham is required to devote the whole of his time to the duties of the office.

In a foot-note of page 8, we must read for "Coroners' Act of 1887," "Municipal Corporations' Act, 1882," and remember that the existing law is that the Coroner's deputy in the large cities must be either a barrister or solicitor; it is important therefore that such alteration be at once made in

the "Municipal Corporations' Act, 1882," as will enable a medical man to act as deputy to the Coroner in municipal corporations and cities.

If the "Coroners' Act Amendment Bill," introduced by Sir Walter Foster on February 19th, becomes law, it will be all the more important for the Coroner to have a sound knowledge of *post mortem* appearances in health and disease, as by this Bill he will be the only person required to view the body.

The several quotations from Dr. B. W. Richardson's speeches are very strong arguments in favour of medical Coroners.

First Lines in Midwifery. By G. ERNEST HERMAN, M.D. Pp. 191. London: CASSELL & Co. LIMITED. 1891.

This book, which is intended for midwives as well as students, contains a great deal of very useful information, but not of a strictly bedside character, as it gives elementary details, anatomical and otherwise, which are of very little use to the midwife, and are not full enough for the student. Although there is much that is good in the work and some little that is new and original, it scarcely carries out its professed purpose. It would be more correctly entitled "A Guide for Medical Students and Midwives preparing for Examination in Midwifery." It would be a capital book with which to refresh the memory a few days before the examination.

Prescribing and Treatment in the Diseases of Infants and Children. By PHILIP E. MUSKETT. Pp. 293. Edinburgh: YOUNG J. PENTLAND. 1891.

This is another of the ready-reference books arranged in dictionary form, which, judging by their number, seem to be in favour with the profession. The author has compiled it from the best known and most trustworthy works on the diseases of children, and the compilation has been well done. The drugs are given first; under each of them there are stated the diseases in which it has been found serviceable, the dose, and mode of administration. Then comes another section, comprising diseases arranged in alphabetical order, with a brief account of the symptoms of each, and the treatment recommended by various authors. The nature of the book necessitates that a good deal must be sacrificed to brevity. Often the reader will run the chance of being bewildered by the list of remedies advocated for a given disease, without sufficient

indication as to which one is likely to give the best results for his particular needs. The danger of using such books—although they are undoubtedly useful in many ways, and this is a good one of the sort—lies in the temptation they afford to shirk the labour of getting a sound knowledge of disease by systematic clinical observation and reading, and to substitute for it a reference to a dictionary of treatment to see "what is good for so-and-so."

History of Circumcision. By P. C. REMONDINO, M.D. Pp. 346. Philadelphia: F. A. DAVIS. 1891.

In a work of this sort, dealing with a subject which is inherently delicate, and which is intimately connected with the religion of a large number of our fellow-beings, we might expect that a medical man would write with dignity and refinement; or, at least, that he would avoid anything approaching to levity or buffoonery. Our readers must judge of the whole from an extract or two:

"Whenever the writer sees the poor anæmic, broken-down victim of many miscarriages, he cannot help but feel that, if the laws of the Damiantina River savages [performing artificial hypospadias] were enforced on their husbands, it would be a blessing to the poor women without materially injuring the husbands, who, in case of need of a re-establishment of the functions of procreation, might be fitted with a vulcanite plate for the occasion—something like our cleft-palate patients are supplied with a plate that enables them to articulate" (p. 59).

"The Grecian landscape and topography does not permit of much richness of romantic incidents or details, any more than the love-making of the unfortunate spider, who is devoured by his spidery Cleopatra at the end of his first sexual embrace, could furnish any incidents for one of Amelie Rives's spirited novels; so that neither minstrel nor bard have recorded the details of the first emasculating tragedy, which, from all accounts, was a kind of an Olympian Donnybrook-fair sort of paricidal-ending tragedy. Unfortunately, Homer was not there to describe the event, or we might have had a Wagnerian opera with its Plutonic music to illustrate all its incidents;" and so on (p. 82). The spelling and grammar in this quotation are Dr. Remondino's.

The work is disfigured throughout by such examples of bad taste; otherwise it is commendable, showing evidence of considerable study, and being, in the main, sound in a surgical sense.

Notes on Preparations for the Sick.

Antiseptic Soap, containing Biniodide of Mercury (5 per cent.).—Edward Cook & Co., Bow, London.

Until quite recently a satisfactory soap, containing as an antiseptic one of the salts of mercury, has been difficult to prepare, on account of the alkaline soap refusing to yield a good lather, oleate of mercury being formed—a compound which has little or no germicidal action. One of the most powerful antiseptics of the mercury salts is, as is well known, the bichloride. Moreover, it is cheap, and easily soluble; but it has the disadvantages of being extremely poisonous, and easily reduced by albuminoid matter, with which it combines, thus being rendered inactive. In a paper recently read before the Society of Chemical Industry in Glasgow, by John Thomson, the solubility of the red biniodide of mercury (which is claimed to be even a more powerful antiseptic than the bichloride) in iodide of potassium has been made use of. A soap can thus be easily prepared containing a certain proportion of the biniodide in a soluble form. It is stated to be permanent, having no tendency to separate, and to be more germicidal in its properties than any other antiseptic soap yet known. This soap has been used with much success in the treatment of chronic forms of eczema, also in parasitic skin diseases, and as a disinfectant in convalescence from scarlet fever.

Nestlé's Milk Food.—H. Nestlé, London.

The leading idea of the manufacturer of this food has been to combine Swiss milk of the very best quality with a substance which, while useful to the child as an aliment, would prevent the coagulation of the casein in large lumps. After many trials, M. Nestlé arrived at the conclusion that thoroughly baked wheat flour was the best adjunct to the milk, and an experience of twenty years has shown that he was right. The mixture of wheat flour, prepared according to an improved method, with carefully concentrated milk, forms a highly nutritious, palatable, and digestible powder, which can be kept for a long time, and sent to any part of the world without losing any of its properties. During the process of baking, the starch contained in the wheat flour is

broken up and partly transformed into dextrine, while the gluten is rendered soluble.

We hold that prepared foods of this kind are infinitely safer for infant feeding in towns than even employing wet nurses or fresh cow's milk.

The prepared food has been efficiently sterilised, everything deleterious having been destroyed by cooking.

Automatic Disinfector.—GEORGE TAYLOR & Co., Liverpool.

The disinfector has simply to be placed in the ordinary w.c. cistern, without fixing or adjustment of any kind whatever. It consists of an ordinary bottle, fitted with a special discharging arrangement, by which a small quantity of the contained disinfectant is automatically administered at each flush. The apparatus works admirably as described, and cannot fail to be of service wherever there is need for constant disinfection.

Hayden's Viburnum Compound.—NEW YORK PHARMACEUTICAL COMPANY, London.

Yet another uterine tonic, said to be "the remedy *par excellence*." It is free from all narcotics, leaves no unpleasant effects, and is perfectly safe. It is said to be a combination of the active principles of the viburnum opulus, dioscorea villosa, and scutellaria lateriflora, combined with aromatics. It has much evidence in its favour, and is well worthy of a trial in all cases of dysmenorrhœa.

Aerated Waters.—PACKHAM & Co., Croydon.

These aerated and mineral waters are all prepared with distilled water, and are therefore likely to be free from anything pernicious.

"Perfect Non Plus Ultra" Thermometer. FERRIS & COMPANY, Bristol.

Messrs. Ferris & Co. have sent us a thermometer which, under this somewhat lengthy name, they have recently issued. It combines the advantages of their "Perfect" Thermometer with those of Mr. Hicks's "Non Plus Ultra," and should therefore become popular with the profession as a pocket companion.

Bristol Medico-Chirurgical Society.

April 13th, 1892.

Mr. F. R. Cross, President, in the Chair.

Dr. Michell Clarke showed a specimen, with microscopic sections, of a tumour of the base of the brain. It occurred in a man who had previously had syphilis; and, besides other symptoms, gave rise to bitemporal hemianopsia. Later he became blind and deaf. The growth was connected with the dura mater, was moderately firm, and microscopically was a so-called "endothelioma." He also showed a heart with several primary growths in the muscular substance, especially in walls of left ventricle and left auricle. There was no tumour elsewhere in body. These growths were oval and spindle-celled sarcoma.

Dr. Elliott read notes on a case of tumour of the pons Varolii, occurring in a girl aged nine. The symptoms were sickness, vertigo, frontal headache, internal squint, paresis of left side of body, and finally coma. The ventricles were found *post mortem* to be much distended, and a glioma was situated on the pons.

Mr. Ewens showed a female patient with long-standing scirrhus of left breast and subcutaneous nodules scattered over the upper part of the chest.

Dr. Leonard Lees described a case of intestinal obstruction, and showed a specimen. The patient, a healthy young man, was attacked with violent abdominal pain and nausea after an indigestible meal. The symptoms partially subsided, but there was no passage of motion or flatus. He became collapsed, and died fifty hours after onset of the pain. It was found that three and a half feet of the ileum just above the ileo-cæcal valve were strangulated by a band stretching from two points on the anterior abdominal wall near the right internal ring.

Dr. Lees also showed a specimen of gangrene of the vermiform appendix from a patient who was suddenly seized with sickness, diarrhœa, and severe abdominal pain. There was no localised tenderness. The symptoms improved, but on the fifth day of the illness there was sudden collapse and death. At the *post mortem* examination the appendix, with two perforations, was found lying in the pelvis, surrounded by signs of extensive peritonitis.

Dr. Roxburgh brought the following case before the Society: A lady, aged 37, was attacked with symptoms of gastro-duodenitis, obstinate constipation, and asthenia in the seventh month of her ninth pregnancy. The urea secreted was diminished; there was no

albumin or sugar. She died comatose after giving birth to a child. The liver was found to be of a bright yellow colour, of the consistence of putty, and structureless, but enlarged. The increase in size appeared to be due to the presence of fat. Dr. Roxburgh considered the case to be one of acute yellow atrophy of the liver in an early stage.

May 11th, 1892.

Mr. F. R. Cross, President, in the Chair.

Dr. Markham Skerritt described a case of transposition of the viscera: the heart and spleen and apparently the stomach were on the right side, and the liver on the left.

Dr. Ewen Maclean showed a boy (brought before the Society also on November 11th) with morbus maculatus. There were three hemorrhages on the retina to be detected.

Dr. Nevill read notes of a case of puerperal pulmonary obstruction. The characteristic symptoms of livid face, gasping respirations, and quickened pulse came on forty-eight hours before the commencement of labour. Delivery was effected as speedily as possible. Phlegmasia dolens followed two days after. The woman recovered. Dr. Nevill mentioned various theories to account for the plugging of the pulmonary artery before the thrombosis in the legs.

Mr. Pickering described a case of nephro-lithotomy in a woman aged 25. Symptoms pointed to stone in the right kidney, and an exploratory opening was made in the loin and a quantity of pus evacuated, together with twenty-three calculi of various sizes. The patient made a good recovery, but still has a sinus discharging urine.

Mr. Greig Smith exhibited a round stone, coated with crystalline deposit, which he had removed by nephro-lithotomy.

Dr. Edgeworth showed specimens of: (1) Sarcoma of the ileo-cæcal valve, which gave rise during life to attacks of abdominal pain, &c.; (2) Strangulation of Meckel's diverticulum by the diverticulum cord. This caused symptoms of acute intestinal obstruction; (3) Partial intussusception of the vermiform appendix. He also showed a child with head-nodding and nystagmus.

Mr. Morton showed a child with symmetrical enlargement of several joints (knees, elbows, &c.). He considered the condition one of pulpy disease, but the diagnosis was uncertain.

Mr. Morton (for Dr. Barrett Roué) exhibited a specimen of fæcal fistula into the peritoneal cavity. There was no sign of tubercular disease, and the cause of the perforation was obscure.

G. Munro Smith, *Hon. Sec.*

The Library of the Bristol Medico-Chirurgical Society.

The following donations have been received since the publication of the List in March:

May 31st, 1892.

J. Michell Clarke, M.B. (1) ... ... 3 volumes.
C. F. Pickering. (2) ... ... 11 ,,
Arthur B. Prowse, M.D. (3) ... ... 1 volume.
The Staff of St. George's Hospital. (4) ... 10 volumes.
J. Greig Smith. (5) ... ... 16 ,,
R. Shingleton Smith, M.D. (6) ... ... 12 ,,
Simeon Snell. (7) ... ... 1 volume.
P. Watson Williams, M.D. (8) ... ... 2 volumes.

Unbound periodicals have been received from Dr. Michell Clarke, Mr. L. M. Griffiths, Mr. W. H. Harsant, and Mr. F. P. Lansdown.

Framed pictures have been presented by Mr. E. J. Burder and Dr. W. H. Spencer.

FOURTH LIST OF BOOKS.

The figures in brackets refer to the figures after the names of the donors, and show by whom the volumes were presented. The books to which no such figures are attached have either been bought from the Library Fund or received through the *Journal*.

Acton, W. ... ... *Prostitution*... ... ... (2) 1857
Adams, W..... ... *On Finger-Contractions and Hammer-Toe.* 2nd Ed. 1892
Aitken, W..... ... *The Science and Practice of Medicine.*
(1) Vol. I. 3rd Ed. 1864

Ball, M. V..... ... *Essentials of Bacteriology* 1891

Barton, J. K. ... *Tables for the Diagnosis and Treatment of Syphilis.* 3rd Ed. [1892]
Boyce, R. ... ... *A Text-book of Morbid Histology* 1892
Bramwell, B. ... *Atlas of Clinical Medicine.* Vol. I., Part IV. ... 1892
Budd, G. ... ... *Diseases of the Liver* ... ... (2) 3rd Ed. 1857

Carrington, R. E. *Notes on Pathology* 1892
Catalogue (Encyclopædic) of the Guille-Allès Library and Museum, Guernsey 1891
Curgenven, J. B. *The Disinfection of Scarlet Fever* 1891

Davis, H. ... ... *Anæsthetics* ... ... 2nd Ed. 1892

Eisenberg, J. ... *Bacteriological Diagnosis* ... ... 2nd Ed. 1892

Fagge and P. H. Pye-Smith, C. H. *Text-Book of the Principles and Practice of Medicine.* 2 vols. ... (8) 3rd Ed. 1891

Gemmel, W. ... *Dermic Memoranda* ... ...[1892]
Goodhart, J. F. .. *On Common Neuroses* 1892
Gray, H. ... ... *Anatomy* ... ... (6) 1858

Hope, J. ... ... *On the Diseases of the Heart* ... ... (2) 3rd Ed. 1839
Howard, F. ... *On the Teeth* ... ... (2) 40th Ed. 1857
Hughes, H. M. ... *Practice of Auscultation* ... ... (2) 2nd Ed. 1854

Jones and E. H. Sieveking, C. H. *Pathological Anatomy* ... ... (2) 1854

Kingsbury, G. C. *The Practice of Hypnotic Suggestion* ... ... (5) 1891

Lane, H. ... ... *Differentiation in Rheumatic Diseases (so-called).* 2nd Ed. 1892
Lawrance, D. D. Stewart and E. S. *Essentials of Medical Electricity* ... 1892
Lewers, A. H. N. *Diseases of Women* ... . (5) 2nd Ed. 1890
Lowndes, F. W.... *Reasons why the Office of Coroner should be held by a Member of the Medical Profession* ... ... [N.D.]

Neale, R. ... ... *The Medical Digest* ... ... (6) 1877

Ormerod, J. A. ... *Diseases of the Nervous System* 1892
Osler, W. ... ... *The Principles and Practice of Medicine* 1892

Page, H. W. ... *Railway Injuries* ... ... (5) 1891
Pye, W. ... ... *Surgical Handicraft.* 3rd Ed. (Ed. by T. H. R. Crowle) ... ... (5) 1891
Pye-Smith, C. H. Fagge and P. H. *Text-Book of the Principles and Practice of Medicine.* 2 vols. ... (8) 3rd Ed. 1891

Quain, J. ... ... *Anatomy.* 10th Ed. (Ed. by E. A. Schäfer and G. D. Thane). Vol. II., Part II. 1892

Rideal, S. ... .. *Practical Chemistry* ... ... (5) 1890
Robson, A. W. M. *On Gall-Stones* 1892
Rosenthal, M. ... *Elektrotherapie* ... ... (6) 1873

Schweinitz, G. E. de *Diseases of the Eye* 1892
Shaw, J. ... ... *Epitome of Mental Diseases* ... ... (5) 1892
Sheen, A. ... ... *Workhouse Medical Officer* ... ... (5) 2nd Ed. 1890
Sieveking, C. H. Jones and E. H. *Pathological Anatomy* ... ... (2) 1854
Snell, S. ... ... *A History of the Medical Societies of Sheffield* (7) 1890
Stewart and E. S. Lawrance, D. D. *Essentials of Medical Electricity*... 1892

Todd, R. B. ... *Clinical Lectures—Nervous System* ... (2) 2nd Ed. 1856
,, ... ,, *Urinary Diseases*... ... ... (2) 1857

Treves, F. ... ... *The Student's Handbook of Surgical Operations* ... 1892

West, C. ... ... *On Diseases of Women.* Two Parts ... (2) 1856-58
White, W. H. ... *Materia Medica* 1892
Williams, C. J. B. *Principles of Medicine* ... ... (2) 3rd Ed. 1856

TRANSACTIONS, REPORTS, JOURNALS, &c.

The List of current Periodicals to be seen in the Library is given in the Journal for March.

Alienist and Neurologist, The Vol. XII. 1891
American Practitioner and News, The Vols. XI. and XII. 1891
American Surgical Association, Transactions of the Vol. IX. ... 1891
Annals of Surgery ... ... (5) Vol. X. 1889
Australian Medical Journal, The New Series ... ... (5) Vol. X. 1888
Bäder-Almanach ... ... (3) [1892]
Birmingham Medical Review, The ... ... (5) Vol. XXV. 1889
Bulletin de l'Académie de Médecine Tomes XXV. & XXVI. ... 1891
Canada Medical and Surgical Journal ... ... (5) Vol. XVI. 1888
Cincinnati Lancet and Clinic, The ... ...(5) Vol. LII. 1884
(Continued as *The Cincinnati Lancet-Clinic.*)

Cincinnati Lancet-Clinic, The Vol. LXV. 1891
(Continuation of *The Cincinnati Lancet and Clinic.*)
Dublin Journal of Medical Science, The (6) Vols. LXXVII.—LXXX., 1884-85; (5) Vol. LXXXVIII., 1889; Vols. XCI., XCII. 1891
Edinburgh Medical Journal (5) Part II., Vol. XXXIV., 1889; Part II., Vol. XXXVI., Part I., Vol. XXXVII. 1891
Epitome of Medicine, The Vol. VIII. 1891
(Continuation of *The Medical Analectic and Epitome.*)
Fortschritte der Krankenpflege 1891
Gazette de Gynécologie Tome VI. 1891
Gazette des Hôpitaux 1891
Hospital, The Vol. XI. 1892
Hospitals—
Saint Bartholomew's Hospital Reports (6) Vols. VIII., IX., XII., XIII. 1872-77
St. George's Hospital Reports (4) Vols. I.—VI., 1866-73; (4, 6) Vol. VII., 1875; (4) Vols. VIII.—IX. 1877-80
Index Medicus Vol. XIII. 1891
International Clinics Vols. III., IV. 1892
Journal of Anatomy and Physiology, The (1) Vols. XX., XXI. 1886-87
Journal of Laryngology and Rhinology, The Vol. V. 1891
Medical and Surgical Reporter, The .. .. (5) Vol. LVI. 1887
Medical Annual, The 1892
Medical News, The Vol. LIX. 1891
Progrès Médical, Le Tome XIV. 1891
Revue de Laryngologie, d'Otologie et de Rhinologie Tome XI. ... 1891
Royal Academy of Medicine in Ireland, Transactions of the Vol. IX. 1891
St. Louis Medical and Surgical Journal, The ... (5) Vol. LVII. 1889
Year-Book of Scientific and Learned Societies 1892

Presentation to Sir George Buchanan, F.R.S.

As Sir George Buchanan has lately resigned the post of Medical Officer of the Local Government Board, it is proposed to present him with some permanent memento of the esteem in which he and his work are held.

For the purpose of forwarding this movement, a strong Committee has been formed, of which Dr. Bristowe is Treasurer. Dr. Davies, the Medical Officer of Health for Bristol, who is a member of the Committee, will be glad to send to the proper quarter any contributions that may be entrusted to him.

The Jefferson Medical College of Philadelphia.

The Board of Trustees and the Faculty of Jefferson Medical College are about to erect a handsome hospital, lecture hall, and laboratory building. The estimated cost of the building is $500,000. With the hospital on one side affording clinical facilities and the laboratory on the other side of the college hall for scientific research and training, the college will be most favourably situated for giving thorough instruction in medicine. The move has been made necessary by the large number of students who are now being instructed in this institution and because the Faculty desire to keep the school and hospital in the foremost rank of medical education in the United States.

SCRAPS

PICKED UP BY THE ASSISTANT-EDITOR.

Medical Philology (II.)—In the *Promptorium* will be found the first two of the following quotations. The other two are from the British Museum MS. of the *Catholicon*.

> AKE, or ache, or akynge. *Dolor.*
> AKYN. *Doleo*, CATH.
> To **Ake**; *Nocco, &* cetera; *vbi*, to hurt.
> An **Aking**; *Nocumentum.*

The book referred to as CATH, to which the compiler of the *Promptorium* was indebted for the second of the Latin words given, was the *Catholicon* or *Summa* of Johannes de Janua, a dictionary finished by him in 1286. The cross-reference in the third word quoted adds nothing about the word *ake*.

Mr. Herttage's note is:

> "'*Doloir.* To grieve, sorrow: to ake, warch, paine, smart.' 'Cotgrave. Baret points out the distinction in the spelling of the verb and noun: '*Ake* is the Verbe of this substantive *Ache*, *Ch* being turned into *K*.' Cooper in his *Thesaurus*, 1584, preserves the same distinction. Thus he says—'*Dolor capitis*, a headache; *dolet caput*, my head akes.' The *pt. t.* appears as *oke* in P. Plowman, B. xvii. 194; in Lonelich's *Hist. of the Holy Grail*, ed. Furnivall, and in Robert of Gloucester, 68, 18. A.S. *acan.*"

It is recognised by some of the most recent dictionaries that the present spelling of the verb is wrong. In the *New English Dictionary* it can be seen that the verb is historically *ake*, and was so written even as late as the time of *Dr. Syntax*, 1821. The first extract from the *Promptorium* shows that about 1440 *ake* and *ache* were both used for the spelling of the substantive. That in 1568 it was sometimes pronounced as it is now is clear from a passage in Turner's *Herbal*, in which reference is made to "catarres,

runninges of the eyes, and other aykes." But, about that time, as appears from Cooper and Baret, there was a tendency to reserve *ake* for the spelling of the verb and *ache* for that of the substantive, which was pronounced *aitch*. Books of the latter half of the sixteenth century contain many a verbal joke arising out of the identity of sound with that of the letter H. An instance of such pronunciation is found in Henry Chettle's *Kind-Harts Dreame*, 1592, where a description is given of "trauelers that by incition are able to eafe all aitches" (p. 54 of Reprint in *Shakspere Allusion-Books*, 1874). This pronunciation is clearly referred to by Beatrice (*Much Ado about Nothing*, III. iv. 53–6).

Beatrice. By my troth, I am exceeding ill; heigh-ho!
Margaret. For a hawk, a horse, or a husband?
Beatrice. For the letter that begins them all, H.

Shakspere also makes us familiar with the dissyllabic form of the plural:

Aches contract and starve your supple joints.—*Timon of Athens*, I. i. 257.
Their fears of hostile stroke, their aches, losses.—*Ibid*, V. i. 202.
I'll rack thee with old cramps,
Fill all thy bones with aches, make thee roar.—*Tempest*, I. ii. 369–70.

This pronunciation continued till the beginning of the 18th century. In "The Description of a City Shower," Swift wrote (*Tatler*, No. 238, October 17, 1710):

A coming shower your shooting corns presage,
Old aches throb, your hollow tooth will rage.

"In the old folio, and first octavo, this word was used as a dissyllable, and so it has continued in all the subsequent editions both of the *Tatler* and Swift's *Works*, till the collection of the English Poets was published in 1779 by Dr. Johnson."—(*Tatler*, ed. 1786, Vol. vi. p. 189). Late editions read "old aches will throb."

In 1806, John Kemble, at Covent Garden, playing Prospero in Dryden and Davenant's version of *The Tempest*, pronounced the word according to the Shaksperian metre, and thereby aroused the anger of the newspaper critics and many regular playgoers. To his credit he did not give way to the ignorant and popular clamour. When it was announced from the stage that one night he was too ill to appear, an unlearned wag cried out, "Mr. Kemble's head *aitches*." During Kemble's absence, the part was played by G. F. Cooke, who, as a way out of the difficulty with which he was confronted, omitted the whole line. A wit then printed this verse as "Cooke's Soliloquy":

"*Aitches* or *akes*, shall I speak both or either?
If *akes* I violate my Shakespeare's measure.
If *aitches* I shall give King Johnny pleasure;
I've hit upon 't—by Jove, I'll utter neither."

Medical Missions.—Medical missions abroad grow apace, but in very small proportion to the field of work. At the C.M.S. Hospital, Kashmir, there are two European surgeons (Mr. Arthur Neve and his brother, Dr. Ernest Neve), with a qualified house-surgeon and a staff of twelve assistants. These work a hospital with accommodation for upwards of one hundred in-patients, a branch dispensary in the city, and a leper asylum. Visiting is also systematically carried on among all the outlying districts of the valley. During the past year 14,907 new patients were seen and 35,559 visits registered. Such a large proportion of the work is surgical that one patient in five requires operation. Altogether during the year 3,097 operations were performed. Long ranges of wards are filled with the victims of poverty, dirt, hereditary disease, casualties, or contagion. Very few die in the hospital; perhaps in the whole year not more than five or

six. Only three of the operation cases died, and one of these was from typhus.

Food is so cheap that the patients get a generous diet. Here is a list of the food supplied on one day to seventy patients: Rice, 135 lbs.; meat, 34 lbs.; milk, 16 pints; sweet oil, 4½ lbs.; salt, 30 ozs.; spices, 27 ozs.; vegetables, about 40 lbs. The total cost of this was about Rs. 6-8, or 10s. 6d.

The work done in the right spirit would be missionary as well as Christian if there were no preaching, for most Christian virtues, notably brotherly kindness, are proclaimed better by deeds than by words. Here is a form of teaching, which none can gainsay, extended in practical benefits to 15,000 people a year, and known by every inhabitant of the valley and the mountains around, and by many in the land of the Great Llama, and in the broad plains of Turkistan and Central Asia. But the doctors aim at being not only the physicians but the friends and spiritual teachers of every patient in the hospital.

The out-patients are seen at mid-day, when they and the whole staff of the hospital are gathered together in the waiting-room. Then one of the lessons for the day is read in Urdu, together with some suitable prayers, followed by an address. In the crowd may be seen the dark faces of the natives from the plains, in contrast with the fair Kashmiris and the ruddy-complexioned Yarkandi; here are the fierce features of the Afghan; there the stalwart form of the Sikh, the wild mountaineer of Chilas, where no European has ever penetrated; the melancholy-looking Gujar, and many another strange tribe of the Himalayas and Central Asia.

Gratitude is not usually a very strong element in the Kashmiri character. The want of it is apt to be rather conspicuous, and although occasionally disagreeable in its manifestations, sometimes it is amusing and sometimes pathetic. An example of a rather gross case of ingratitude was a tailor, who was brought in with a bad strangulated hernia. After operation, he made an uninterrupted recovery. But he was a man who loved a grievance. So instead of rejoicing that he had been snatched from the jaws of death, he made great complaints about being kept in hospital ten days, instead of being allowed to go home at once. More amusing are those cases in which, after recovery from disease, patients are displeased because money is not given to them. An old man, who had been blind in both eyes with cataract, had his sight restored by operation in hospital. His dissatisfaction at not being subsidised quite swallowed up his gratitude for recovery of vision. The pathetic cases are those in which the poor people are so oppressed and down-trodden and miserable that, having found a haven of rest in the hospital, they resent bitterly any attempt to discharge them when cured.

The foregoing has been compiled from various notes written by Mr. Arthur Neve, who came to England recently, and who hopes to deepen home interest in this branch of missionary work. He will doubtless be glad to receive help of any kind sent direct to the hospital or through the Society at its head quarters in Salisbury Square, London, E.C.

Public and professional interest in medical mission work will be further stimulated by the record of the adventures of Dr. Montague, who while at work at a station in British New Guinea was taken prisoner by some native cannibal tribes from Dutch New Guinea. After two and a-half years' captivity he has just escaped.

At p. 71, line 5, for *ἀγχόνη* read *ἀγχόνη*.